Department of Biochemical Engineering and Biotechnology

Faculty Board Meeting (1/2017-18)

July 31, 2017

The 1st Departmental Faculty Board Meeting of 2017-18 was held on 24th July 2017 at 3:00 pm in the Departmental Committee Room (I-230). The following members were present:

1.	Prof. Atul Narang	Chairman
2.	Prof. P. K. Roychoudhury	Member
3.	Prof. Saroj Mishra	Member
4.	Prof. T.R. Sreekrishnan	Member
5.	Prof. D. Sundar	Member
6.	Prof. Ritu Kulshrestha	Member
7.	Prof. Preeti Srivastava	Member
8.	Prof. Ravikrishnan Elangovan	Member
9.	Prof. Z.A. Shaikh	Member
10.	Prof. G. P. Agarwal	Special Invitee
11.	Prof. Ashish Misra	Convener

Item No. 1. Confirmation of minutes of 9th DFB meeting (2016-17)

The minutes of the 10th DFB meeting (2016-17) were confirmed as circulated.

Item No. 2. Matters arising from the above meeting

Item No. 3. Matters arising from the above meeting

*The HOD showed the layouts for lab renovation and the list of equipment received from the faculty as minuted in the DFB (9/2016017) (attached **zip file**). The list of equipment specified the functional equipment that would be provided by the department, and the equipment for which the department would provide financial support from PLN-03. Departmental support for equipment requested by Prof. Ashish Misra was deferred until he determines the precise amount of his institute start-up grant.*

Item No. 6. Discussion on space allotment for the department proposed by the DDO

*The HOD showed the board the directive issued by DD (S&P) on 7-July-2017 asking the HOD to implement the space re-allocation delineated in the memo (**Annexure 1**). The HOD informed the board about Prof. Prashant Mishra's*

failure to respond to multiple requests to hand over the keys. The DFB unanimously recommended that Prof. Prashant Mishra remove the locks in I-206A and I-337 (assigned to Prof. Ashish Misra and Ravi Elangovan) by August 4, 2017, and the locks in I206-A (assigned to Prof. Shilpi Sharma) by Dec 15, 2017.

*The HOD also showed the board a letter from Prof. Saroj Mishra asking for a discussion of space in the BRL lab (**Annexure 2)**. After extensive discussion with departmental space committee members, Prof. Saroj Mishra agreed to provide space in BRL for Prof. Prashant Mishra as per the notification of the DD(S&P).*

Item No. 7. Discussion of institute faculty hiring plan 2017

The HOD apprised the board of Prof. Ashish Misra's sending faculty hiring emails and flyers to around 90 HODs in US chemical engineering departments.

Item No. 3. Selection of departmental nominees and committees

For the 2017-2018 academic year, the board identified in-charges of various labs/facilities (**Annexure 3**) and also nominated faculty members on various departmental and Institute committees (**Annexure 4**).

[Action: AN]

Item No. 4. Courses (Determination of cycles, assignment of TAs, update on consumables)

The board recommended the following distribution of labs and lab cycles (**Annexure 5**); and assignment of TAs in the PhD/MSR (**Annexure 6**) and M. Tech. (**Annexure 7**) programs.

Item No. 5. New billing procedures (Forms C and NC to be done by Storekeeper)

Prof. Zia Shaikh, in his capacity as the faculty incharge for departmental stores, informed the board of new procedures for streamlining the billing. He made a short presentation to the board summarized the new procedures for billing, PDA, and write-off (see attachment **PurchaseProcess.pptx**). The goal of these new procedures is to (1) eliminate all physical paper movement to the Storekeeper and (2) ensure that all forms (C, NC, write-off, etc) are prepared not by the Storekeeper (and not by faculty members or their students). All faculty members are expected to follow these new procedures, which become effective on August 31, 2107.

[Action: All faculty members]

Item No. 6. External reviews (Identify committee for external reviews)

The HOD showed the board a letter from the DD (S&P) indicating the schedule for the external review of the department and requesting the names of the departmental committee members nominated to address this issue (**Annexure 8**). The board recommended a departmental committee consisting of Profs. Atul Narang, D. Sundar, Shilpi Sharma, Preeti Srivastava, and Z. A. Shaikh.

Item No. 7. UMIST

The HOD showed the board the previously circulated document written by Prof. Nigel Hooper of UMIST on areas of potential collaboration between UMIST and the department (**Annexure 9**). Faculty members interested in collaborating must inform the HOD by August 11, 2017.

[Action: AN]

Item No. 8. Annual performance appraisals (recommendations from Dean Faculty)

The HOD informed the board about the new guidelines for annual faculty appraisal communicated by the Dean faculty (**Annexure 10**). The faculty members were informed that contribution to the department in administrative affairs and infrastructure development are important components of this evaluation.

[Action: AN]

Item No. 9. Offering Instrumentation lab to CRF

The HOD apprised the board of the excellent work done by Prof. Zia Shaikh and Mr. Mukesh Anand in reviving the nearly defunct Instrumentation lab.

The HOD also showed the board a copy of CRF's instrument sharing policy which would allow the department to monetize its equipment resources, thus permitting better maintenance in the future. Since all instruments are now functional, the HOD proposed that these instruments be offered to the CRF. The board welcomed this suggestion provided there was evidence that sharing instruments with CRF would not compromise their use by departmental students/staff. It was decided to get the requisite information from Mr. Mukesh Anand.

[Action: Prof. AN, ZAS]

Item No. 10. MTP evaluation

The convener showed the board a request received from the MTP coordinator for moderation of a set of final MTP evaluations. The board recommended that moderation be taken up together after completion of all the MTP evaluations.

Item No. 11. Any other items with the permission of the Chair

a. **New course template for HUL383**
   The board had no comments on this issue.

b. **Recommend nominee for Senate**
   The board recommended Prof. Ravi Elangovan as the senate nominee.

c. **Formation of SRC for students registered under TRIPP**
   The board had no comments on this issue.

d. **Proposal of Coordinator, VOTT, to start MSR program in VOTT**
   The board had no comments on this issue.

Ashish Misra
Convener, DFB

Distribution

All DBEB faculty by email

Cc: Office file

Annexure 1

OFFICE OF THE DEPUTY DIRECTOR (STRATEGY & PLANNING)

7-July-2017
ADSP/64445

The issue of allocation of laboratory space to different faculty members in DBEB has been pending for quite some time. As it had not been possible to resolve this issue within the Department, the same was flagged to the DD(S&P) office as Chair of the Space Committee. After considering all the factors and hearing all the concerned parties, the following allocation is notified:

S. No:	Room No:	Name of the Laboratory	Area	Remarks
1.	I - 205	Biochemical Research Laboratory	2432 sq ft	Approximately 700 sq ft of the lab space to be assigned to Prof. Prashant Mishra. The committee visiting the Department noted that space in I-205 was not being used effectively with certain sections storing lot of unused equipments and other supplies. Prof. Saroj Mishra is requested to make space available to Prof. Prashant Mishra so that some of the equipment from other labs, preferably with him can be moved there.
2.	I - 321	Bioscience Laboratory	1087 sq ft	To be converted to a teaching lab of the Department
3.	I - 206A	Structural Biology Laboratory	800 sq ft	To be retained by Prof. Prashant Mishra for now but to be vacated by Dec. 2017 and then assigned to Prof. Shilpi Sharma.
4	I - 206B	Protein Engineering Laboratory	800 sq ft	To be allocated to Prof. Ashish Misra
5	I - 329	Enzyme Engineering Laboratory	960 sq ft	To be retained by Prof. Prashant Mishra
6	I - 337	Enzyme Engineering Extension	480 sq ft	To be developed and run by Prof. Ravi Elangovan as departmental BSL2 facility

Prof. Atul Narang, Head DBEB is requested to facilitate implementation of the above allocation as soon as possible.

(M. Balakrishnan)
DD(S&P)

Head DBEB

copy to:
Prof. Prashant Mishra
Prof. Ravi Elangovan
Prof. Ashish Misra
Prof. Shilpi Sharma
Prof. Saroj Mishra

Annexure 2

From: sarojm@dbeb.iitd.ac.in
Subject: Re: Issue of Allocation of Laboratory space to different faculty members
Date: Fri, July 21, 2017 5:46 pm
To: "Prashant Mishra" <pmishra@dbeb.iitd.ac.in>
Cc: "Ravi Elangovan" <elangovan@dbeb.iitd.ac.in>,"Ashish Misra" <ashishmisra@dbeb.iitd.ac.in>,"Shilpi Sharma" <shilpi@dbeb.iitd.ac.in>,"sarojm@dbeb.iitd.ac.in" <sarojm@dbeb.iitd.ac.in>,"Atul Narang" <anarang@dbeb.iitd.ac.in>

> Dear All:

I am sure you have gone over the orders passed by the space committee. Pl note that we recently got the BRL lab measured as it had to be renovated. The space being used there by me worked out to be only 1443.8 sq feet. The area under mutation lab was not taken (nor the laminar flow behind it) as the culture collection facility belongs to the whole department. The space shown in the circulated note was 2432 sq feet!!. I wonder how those numbers came against my name. I do'nt have difficulty in allowing Prof. Prashant to use some space in the lab but the numbers need to be correct.I suggest that we have a look at this number in the next DFB.

Regards,

Saroj Mishra All,
> Â FYI, please find attached scanned paper about theÂ Issue of Allocation
> Â of Laboratory space to different faculty members , the following
> allocation is notified.
> Thanks & RegardsSakshi Bhatnagar

Annexure 3

In-Charge Laboratories / Facilities in DBEB

	Location	Intercom	In-charge (2015-2016)	In-charge (2017-18)
Bioprocess	I-103	6145	GPA/ZA	AN
Bioprocess Store Room	I-102			AN
Cold Room	I-124	6147	GPA	ZAS
Cold Room	I-302		PM	RE
Computer Lab/BTIS	I-231	6156	DS	DS
Computation (PG lab)	I-132	6152	AN	Head
Dark Room	I-208			PS
DG Set (Power Plant)	near Block II	6235		AKS
Instrumentation	I-233A	6151	GPA/ZA	ZAS
Mutation	I-205	6123	SM	SM
M.Tech. Teaching Lab	I-321	6153	PM	Head
Pilot Plant	I-131	6150	TRS	TRS
Radioactivity	I-207		AN	AN
UG Teaching Lab	I-33	6146	RE/SS	PS/RE
UPS	near I-232		DS	AKS
Animal Cell Culture	I-32	6148	PKRC/RK	PKRC/RK
Biochemical Research (BRL)	I-205	6155	SM/PM	SM/PM/PS
Bioscience	I-130	6220	AN/RK	AN
CoE (Bioprocess)	I-232A		AKS	AKS
Downstream Processing	I-127	6149	GPA	GPA/ZAS
Enzyme Engineering	I-329	6154	PM	PM
Enzyme Process (BSL-2)	I-337	6097	PM	RE
ICP-MS (CRF)	I-233B	6390	ZA	ZAS
LC-TOF (CRF)	betn Block I & II	6297	SM	SM
Metagenomics	I-128	6291	SS	ZAS
Molecular Machines	I-335	6243	SN	RE
Molecular Modeling	I-232	6316	DS	DS
Pharmaceutical Biotech	I-25	6208	VSB/AKS	AKS
Plant Cell Cultivation I	I-27	6171	AKS	AKS
Plant Cell Cultivation II	I-24	6158	AKS	AKS
Protein Engineering (PEL)	I-206B	6283	PM	AM
RNA I	I-26	6170	PS	PS
Structural Biology (SBL)	I-206A	6274	PM	SS
Waste Treatment	I-121	6147	ZA	TRS
Waste Treatment (Pilot Plant)	II-7	6304	ZA	TRS
Dr. Ritu Kulshreshtha's lab	I-33			RK

Annexure 4

For Academic Year 2017 – 2018

Departmental representatives to Institute bodies, constitution of DRC, and nomination of faculty for handling various departmental responsibilities.

The board made the following recommendations for the session 2017-2018:

Departmental nominees to Institute Bodies

Board of Academic Programs (BAP)	T. R. Sreekrishnan and D. Sundar
Academic Interaction Council (AIC)	Ritu Kulshreshtha
Computer Users Committee (CUC)	D. Sundar
Advisory Committee of Library (ACL)	Atul Narang
Alumni Affairs	Ravikrishnan Elangovan
T&P Coordinator	Ravikrishnan Elangovan
IRD Board	Saroj Mishra
Faculty Affairs	Shilpi Sharma
EHLSU	Prashant Mishra
Safety Committee	A.K. Srivastava
Institutional Biosafety Committee (IBSC) #	Saroj Mishra (Internal Expert) Preeti Srivastava (Member Secretary)
Institute Website Committee	D. Sundar
Course NIN100 – Introduction to Engg	A.K. Srivastava Z. A. Shaikh
Course NEN101 – PESR	Ritu Kulshreshtha
Open House	Ashish Misra, Z. A. Shaikh
Tryst	Z. A. Shaikh
Review of the Department (follow up on the 2014 external review of the department)	Atul Narang, D. Sundar, Shilpi Sharma, Preeti Srivastava, Z. A. Shaikh (?)

Departmental responsibilities – Faculty incharge(s)

Coordinator, BTech/Dual Degree Programs	Z. A. Shaikh
Coordinator, Major Term Project (MTP)	Ashish Misra
Coordinator, Bachelor Term Project (BTP)	Ravi Elangovan
Coordinator, MSR and PhD Program	Ritu Kulshreshtha
Postdoc Faculty Mentor	Shilpi Sharma
Convener, Faculty Board	Ashish Misra
Time Table	Shilpi Sharma
Departmental Stores (including signing on Form-C/NC of IRD/FITT projects)	Z.A. Shaikh
IMPREST	Ashish Misra
Lectures and Seminars	D. Sundar
Departmental Library	Atul Narang
Webmaster	D. Sundar Ravikrishnan Elangovan
Chairman, IRD Selection Committees	A. K. Srivastava
Technical Services (Power, water, etc)	A. K. Srivastava

Standing Committees of the Department

Faculty search committee	D. Sundar (Chair)
Postdoc selection committee	Head (Chair), Postdoc Faculty Mentor (Shilpi Sharma), Preeti Srivastava, Z A Shaikh, Ashish Misra
PhD recruitment committee	Ritu Kulshreshtha (PhD coordinator), Saroj Mishra, Prashant Mishra, A. K. Srivastava, T. R. Sreekrishnan
Design/Practical Experience (DPE) Non-graded Units (NGU) committee	A. K. Srivastava, Saroj Mishra, Ravikrishnan Elangovan
Curriculum Review & Development (including developing terms and reference for self learning, design component and practical experience)	Atul Narang, D. Sundar, Preeti Srivastava, Shilpi Sharma, Z. A. Shaikh
Committee for write-off of obsolete/unserviceable stores	A.K. Srivastava, Z. A. Shaikh, Ashish Misra
Space Planning and Utilization	Ravikrishnan Elangovan, Z. A. Shaikh, D. Sundar, Preeti Srivastava
BETA – Biochemical Engineers and Technologists Association	President – Ravikrishnan Elangovan Vice President – Ashish Misra Gen Secretary – Student TBA
Class Committees for B.Tech/Dual Degree (Chairman/Member/Convener)	2013 Entry (SM / AKS / ZA) 2014 Entry (GPA / PKRC / DS) 2015 Entry (VSB / RE / SS) 2016 Entry (AN / TRS / AM) 2017 Entry (PM / SN / PS)
Special Advisors for weak students on probation	Z. A. Shaikh, Ritu Kulshreshtha, Ravikrishnan Elangovan, Sunil Nath, Prashant Mishra, Ashok Srivastava, Saroj Mishra

Departmental Research Committee (DRC)

1	T. R. Sreekrishnan		Chairman
2	Atul Narang	HOD (Ex-officio)	Member
3	D. Sundar	Departmental representative to BAP	Member
4	Shilpi Sharma		Member & Convener
5	Ritu Kulshreshtha	MSR Coordinator, PhD coordinator	Member
6	Saroj Mishra		Member
7	Ashok Srivastava		Member

8	Prashant Mishra		Member
9	Preeti Srivastava		Member
10	Ravikrishnan Elangovan		Member
11	Z.A. Shaikh		Member
12	Ashish Misra		Member

Annexure 5

LAB COURSES, Sem I, 2017-18

COURSE NO	Title	No of students	Venue	MON	TUES	WED	THUR	FRI	TIME
BBL131	PRINCIPLES OF BIOCHEM	61	UG Lab		Cycle3		Cycle 4		2-5 PM
BBL132	GENERAL MICROBIOLOGY	55	UG Lab	Cycle 4				Cycle 3	2-5 PM
BBL231	MOL BIOLOGY & GENETICS	59	UG Lab		Cycle 4			Cycle 3	2-5 PM
BBL733	RECOMBINANT DNA TECH	48	UG Lab	Cycle 4			Cycle 3		3-6 PM
BBL735	GENOMICS & PROTEOMICS	43	M. Tech						3-5 PM
BBL750	GENOME ENGINEERING	21	M. Tech						3-5 PM
BBP840	LAB TECH IN MICRO BIOCHEM	11	M. Tech						3-6 PM
BBP332	BIOPROCESS ENGG LAB	53	Process Lab	√				√	2-5 PM
BBL850	ADVANCED BIOCHEM ENGG	17	Process/UG Lab	√				√	
BBL731	BIOSEPARATION ENGG	46	UG Lab		√		√		2-5 PM
BBL743	HIGH RESOLUTION METH (2 h)	33	Instrumentation		√			√	2-5 PM
BBL737	INST. & ANA. METH. IN BIOENGG. (2 h)	49	Instrumentation	√			√		2-5 PM

Assignment of lab courses to Technical staff:

1. Anish : BBL733 + BBL850
2. Renu : BBL131 + BBP840
3. Sumeet : BBL132 + BBL750
4. Gulshan : BBP332 + BBL735

Annexure 6

Allotment of TAship to Ph.D. and M.S. (R) students (Semester I, 2017-18)

BBL131	None given till DFB
BBL132	Upma Singh, Priyanka, Swati Varshney, Vasu Goel 'MS (R)', Nidhi Yadav 'MS (R)'
BBL133	Anirban Kundu 'MS (R)', Nakul Aggarwal 'MS (R)'
BBL231	Pooja Murarka, Arif Nissar Zargar, Rohit Khandelwal
BBP332	Navodit Kumar Singh, Rabab Anjum, Lovely AKS, Sanjay Kumar
BBL731	Shashi Kumar, Nitika 'MS (R)'
BBL733	Anirban Jana, Srishti Srivastava, Omkar Suhas Vinchure
BBL735	Vidhi Malik, Jaspreet Kaur Dhanjal
BBL737	Moolchand, Manju
BBL743	Nudrat Huda Khan, Jyoti Sharma
BBL750	Jananee Jaishankar, Manju, Divya Singhi
BBP840	None given till DFB
BBL850	Samannaya Hazra, Biju Jacob
WTL	Sonia Gupta, Ashish Lohar, Rishabh Shukla, Deepak Sharma, Deepak Kumar Prasad
Enzyme Engg Lab	Sanjay Singh, Surbhi Goel
Bioscience 1	Anamika Singh, Ritesh Kumar Aggarwal
RNA II	Sonam Takkar
Pilot Plant	Shraddha Maitra, Ngangom Pravina Devi
DSP Lab	Sunil Kumar
BRL	Arpita, Sakshi Agarwal, Nitu Maity
Process Lab	Jitendra Singh Verma, Siddhi, Arun Thapa
Plant Cell Culture Lab	Anveshika
Metagenomics	Gautam
RNA I	Ankur Kumar
Molecular Machines	Vidhu, Shefali Singh
Protein Engineering Lab	Neeti, Ritu Bhardwaj
COE Lab	Raju Kumar
SBL	Tushar Dash

* MS (R) students indicated with an 'MS (R)' after their names

Annexure 7

Allotment of TAship to final year dual degree students (Semester I, 2017-18)

No	Entry No	Name	Supervisor	TAship
1	2013BB50003	Aniruddh Yadav	PS	BBL231
2	2013BB50005	Bijjiga Jayaram	PS	BBL231
3	2013BB50043	Swati Agrawal	VSB	BBL731
4	2013BB50013	Divya Chaudhary	RK	BBL733
5	2013BB50042	Sparsh	RK	BBL733
6	2013BB50022	Mira Kabra	DS	NIN100
7	2013BB50016	Jayant Nahata	TRS	NIN100
8	2013BB50034	Satyarth Gupta	VSB	NIN100
9	2013BB50035	Saurabh Sharma	AKS	AKS
10	2013BB50019	Kumar Sahaj	AKS	AKS
11	2013BB50036	Shailly Dharawat	AKS	AKS
12	2013BB50040	Shubham Maddheshiya	AKS	AKS
13	2013BB50018	Kshitij Rai	AM	AM
14	2013BB50009	Deepak Kumar Jat	AN	AN
15	2013BB50021	Malla Paramesh	AN	AN
16	2013BB50047	Yatish Agrawal	AN	AN
17	2013BB50038	Shreya Pal	DS	DS
18	2013BB50044	Tishya Kapoor	DS	DS
19	2012BB50021	Ramesh Chand Meena	PM	PM
20	2012BB50033	Raghav Kumar	PM	PM
21	2013BB50006	Bintu Kumar Meena	PS	PS
22	2012BB50007	Anant Preet	RE	RE
23	2013bb50017	Kaluram Ninama	RE	RE
24	2013BB50008	Jayant Darokar	RK	RK
25	2013BB50048	Palash Gupta	RK	RK
26	2012BB50041	Nikhil Kanojia	SM	SM
27	2013BB50010	Devendra Singh	SM	SM
28	2013BB50037	Shilpa Kamboj	SM & GPA	SM & GPA
29	2013BB50012	Dhruv Bhalla	SN	SN
30	2013BB50023	Naresh Kumar Meena	SN	SN
31	2013BB50026	Priyanshu Agarwal	SN	SN
32	2013BB50027	Raj Kumar	SN	SN
33	2013BB50028	Rishabh Sethi	SN	SN
34	2010BB50042	Talabathula Ravali Kanaka Saran	SS	SS
35	2013BB50024	Prashant Pandey	SS	SS

36	2013BB50004	Arogya Rajkumar Gummadi	TRS	TRS
37	2013BB50025	Priyanka Jalwan	TRS	TRS
38	2013BB50046	Vageesh Gupta	TRS	TRS
39	2013BB50014	Ekatmika	VSB	VSB
40	2013BB50020	Kunal Chaudhary	ZAS	ZAS
41	2013BB50045	Tushar Khandelwal	ZAS	ZAS

Annexure 8

OFFICE OF THE DEPUTY DIRECTOR (STRATEGY & PLANNING)

06-Jul-2017

Sub: Follow up on external review of Departments, Centres and Schools

Review of all the Departments, Centres and Schools took place nearly three years back. Many suggestions were made by the committees that made the assessment. It is planned to review the steps taken by various entities as a follow up to the review as per following schedule:

S.No:	Action required	Deadline
1.	Academic entities to constitute an internal committee of 3-5 members and inform its composition to the DDSP office	20.7.2017
2.	Director to constitute an Internal Review Committee	31.7.2017
3.	Each entity to submit a report to the Director	31.8.2017
4.	Preliminary feedback from the Internal Review Committee to the Departments/Centres/Schools	15.9.2017
5.	Presentation before the Director and Internal Review Committee (schedule to be announced)	16.9.2017 - 30.9.2017

(M. Balakrishnan)
DD(S&P)

All HoDs of Departments/Centres/Schools

Annexure 9

University of Manchester areas of synergy with IIT Delhi

Division of Pharmacy and Optometry, School of Health Sciences, Faculty of Biology, Medicine and Health

Professor Ian Stratford
(https://www.research.manchester.ac.uk/portal/Ian.J.Stratford.html)

Ian and colleagues have expertise in pharmaceutics, nanotech, and biopharmaceuticals under the umbrella of North West Centre for Advanced Drug Delivery NoWCADD (see http://research.bmh.manchester.ac.uk/nowcadd/)

Potential for links with:
CBME: biomaterials (biomedical nanotechnology, drug delivery systems, regenerative medicine), stem cells, targeted drug discovery systems for cancer.
KSBS: computer aided drug discovery, chaperones
CBT: biopharmaceutical manufacturing, continuous processing, process analytical technology, protein characterisation, product stability.

Dr Katherine Finnegan
(https://www.research.manchester.ac.uk/portal/K.G.Finegan.html)

Katie's research interests include: Molecular mechanisms of inflammation-driven cancer, Tumour immunology, MAPK signalling, Inflammation-based molecular imaging, Inflammatory signalling during wound healing.

Potential for links with:
CBME and ***KSBS*** particularly with respect to the work on wounds, stem cells, targeted drug discovery systems for cancer.

Dr Costas Demonacos (https://www.research.manchester.ac.uk/portal/Constantinos.Demonacos.html)

Costas is interested in Exploiting endoplasmic reticulum stress and unfolded protein response signaling in cancer immunotherapy.

Potential for links with:
DBEB: cancer biology
KSBS: chaperones
CBT: protein characterization and data analysis.

School of Materials, Faculty of Science and Engineering

Professor Sarah Cartmell
(https://www.research.manchester.ac.uk/portal/en/researchers/sarah-cartmell(19a32c70-7c1c-40a0-a798-747c5f8f622e).html)

Sarah is Head of the Biomaterials Group.

Potential links with:
CBME: biomedical materials

Dr Sam Jones
(https://www.research.manchester.ac.uk/portal/samuel.jones-4.html)

Sam's research focuses on virucidal material synthesis and development.

Potential for links with:
KSBS: Biomaterials for antiviral purposes

Dr Deepak Kumar
(http://www.ukrmp.org.uk/hubs/acellular/our-research-team/university-of-manchester-dr-deepak-kumar/)

Deepak's research is focused on regenerative medicine applications.

Potential for links with:
CBME: regenerative medicine.

School of Chemical Engineering and Analytical Science, Faculty of Science and Engineering

Professor Aline Miller
(http://polymersandpeptides.co.uk/)

Aline's research interests are in the development of soft materials for advanced drug delivery, regenerative medicine, hosting and differentiating stem cells, wound repair and also for the development of biosensors.

There is also significant interest within the School of Chemical Engineering and Analytical Science (CEAS) in the areas of biopharmaceuticals mainly through Alan Dickson (see below), and strong interest in Medical Imaging, Process Analytics through Peter Gardner and Krishna Persuad.

Professor Alan Dickson
(https://www.research.manchester.ac.uk/portal/alan.dickson.html)

Alan and other colleagues (Robin Curtis, James Winterburn) in the Centre of Excellence in Biopharmaceuticals (see http://www.coebp.ls.manchester.ac.uk/) are interested in relation to potential interactions around biopharmaceuticals.

Potential for links with:
DBEB: molecular biology & chemical engineering, synthesis of biology with systems engineering, metabolic engineering, mammalian cell reactor, protein engineering
CBME: therapeutics

CBT: biopharmaceutical manufacturing, continuous processing, process analytical technology, protein characterisation, product stability, process development, data analytics.

Manchester Institute of Biotechnology, Faculty of Science and Engineering
Dr Philip Day
(https://www.research.manchester.ac.uk/portal/en/researchers/philip-day(20a78b1b-664c-4cd5-9ec1-84e0183d2462).html)

Philip and colleagues at the Manchester Institute of Biotechnology (see http://www.mib.ac.uk/) have recent innovations termed GeneGenie [Swainston N et al, Nucl Acids Res, Jul;42:W395-4002014, 2014.] and SpeedyGenes [Currin A et al, Methods Mol Biol. 1472:63-78. 2017] for gene synthesis and directed evolution could offer much value to ***DBEB, CBME, KSBS and CBT*** in areas of industrial biotech, drug development and the development of improved biological compounds. We can also include our binary weapons for enhancing drug activity via transporter-mediated cell accumulation [Grixti GM et al. Frontiers Pharmacol Feb 2017].

In addition, we have increasing interests in dormant microbiome related to chronic inflammatory diseases [Potgieter M et al, FEMS Microbiol Rev Ju; 39(4): 567-91, 2015] and recently we were funded for Newton-Bhabha research fellows to visit our labs, where my single cell studies [Karimiani E et al, Exper Hematol Mar;42(3):183-191, 2014] and microfluidics [Eds, Day PJR, Manz A, Zhang Y. Book, Springer, Sept 2012] knowhow were employed.

We also have over-lapping interests in quantum computing in the recently widely publicised 'growing computer' that is based on DNA [Currin A et al, J R Soc Interface. Mar;14(128) 2017] which might appeal to some researchers within ***CBT***.

Guidelines for annual faculty appraisal

The following guidelines are recommended for the evaluation of the self-appraisal forms submitted for the year 2015-16 that emerged out of the discussions on 2nd March, 2017 with the appraisal committee chairpersons and HoDs and Director, DD(SP) and Dean(Faculty).

1. There will three main components of the evaluation
   (i) Research (ii) Teaching (iii) Other activities.

2. To ascertain the research contribution and impact, efforts should be made to

   (i) Involve an additional area expert from the Institute in the area of the assessee. In the case of Assistant Professor, the expert should be desirably at the level of Associate Professor.
   (ii) Have a short 10-15 mins interaction with the faculty member - not necessarily a presentation.
   (iii) Do a detailed review of a couple of the *best papers* in the relevant period.
   (iv) Record some detailed comments about the creativity, nature and impact of the research instead of a numerical figure. It is important to understand what the research goals are, as well as the expectation from the nature of the work undertaken, viz., experimental, theoretical or computational.
   (v) Provide some constructive feedback and suggestion about the work.

3. For evaluation of teaching, besides perusal of the student feedback, try to understand other relevant factors like innovations, diversity, depth, and involvement.

4. Regarding sponsored projects, how they are contributing to the research output and/or creating experimental platforms.

5. Regarding consultancy, how relevant are these to the research activity.

6. How is the faculty member contributing to the departmental administrative activity - this should be at the level of *satisfactory* and *unsatisfactory*

7. Has the person made any significant contribution to creating resources in the department, viz., in building teaching or research labs.
   While this should be recognized and appreciated it should not come at the expense of sacrificing other research activities and not cause any disappointment during shortlisting or selection interviews.

The institute is likely to announce *Faculty Excellence awards* on the basis of performance in the previous three years. For 2015-16, the committee should take into account the performance in the period 2013-2016. The Appraisal committee can shortlist upto 20 percent of the faculty evaluated for this award which will be finally judged by a centrally constituted committee comprising of external experts.

The committee should also endeavor to give feedback in a relative scale among the assessed faculty within the department.

Sandeep Sen (Dean faculty)