

FW: Extension on Project

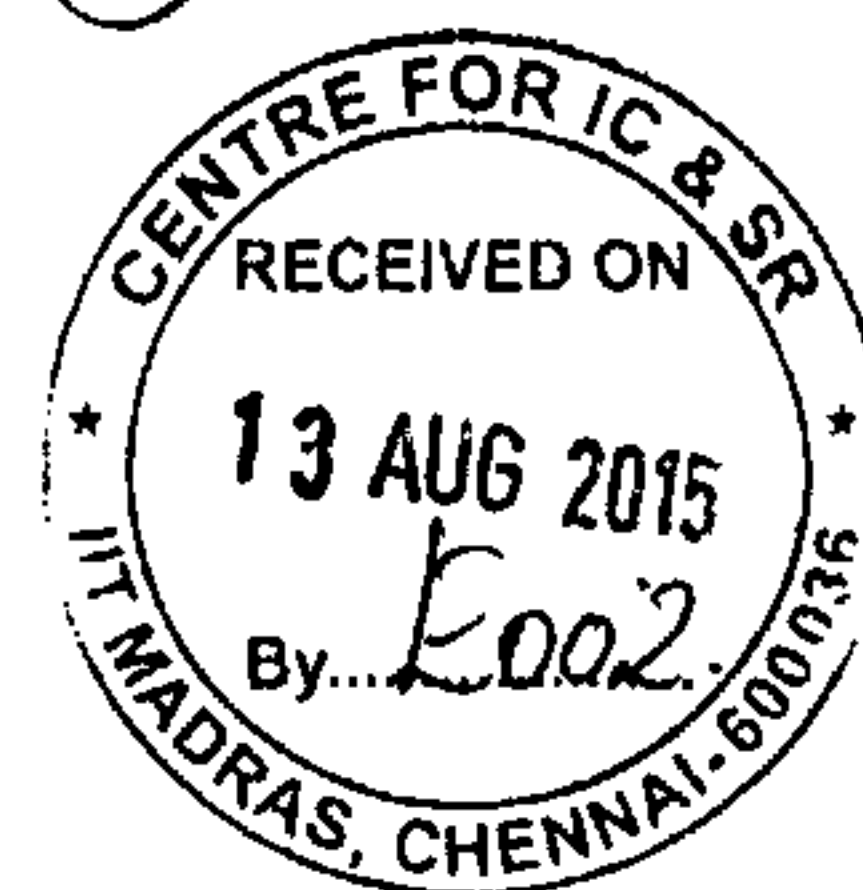
DRICSR

Sent: Wednesday, August 12, 2015 5:18 PM

To: ICSROFFICE

Cc: ICSR ACCOUNTS

B Nagarajan
Deputy Registrar
IC&SR IIT Madras
Chennai 600 036
Ph: 044-2257 8355

**From:** Madhulika Dixit**Sent:** Wednesday, August 12, 2015 11:47 AM**To:** Dean ICSR**Cc:** DRICSR**Subject:** Extension on Project

Dear Prof. Balasubramanian,

I request you to kindly extend the duration of our grant# BIO1415834REFRIMADH by two months as we are yet to receive the pending bills from our vendors.

Thanking you in anticipation,
regards,
Madhu

Current Pcp: 27/8/15

(Research Panel)

Madhulika Dixit, Ph.D.
Associate Professor,
Department of Biotechnology,
Indian Institute of Technology Madras,
Chennai-600 036
Phone: +91-44-22574131
Fax: +91-44-22574102

Dean may consider approving it.

13/8/15

13/8/15

28/10/14 to
27/08/15

PCD - 27/10/15
Copy to (PA)
PI

DESPATCHED

14 AUG 2015

8/13/2015 9:06 A

Sponsored Project Report

APRLNO: **BIO1415834RFRIMADH**

Ent_Month : **11/2014**

TITLE: **Lease of life from left overs**

DEPT: **BIO**

COORNAME: **MADHULIKA DIXIT**

COORNAME2:

COORCODE: **MADH**

COORCODE2:

SPON_AGEN **Research Scholars Innovative Project**

TYPE: **Indigenous**

LOC/IMP: **IND**

SANVALUE: **520000**

START_DAT **28/10/2014**

SAREFNO:

CLOSE_DAT **27/08/2015**

SAREFDATE **30/09/2014**

DURATION: **10**

YEAR: **1415**

PROJ_STAT **On_Going**

PROJ_REM: **NEW**

CENTRE FOR IC & SR, IIT MADRAS

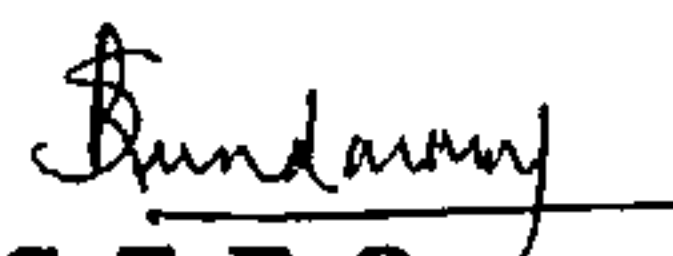
No.ICSR:Newproject:2014 | 7611

October 28, 2014

Sub: Research Scholar Innovation Project - Numbering of request for adoption in correspondence

A Research Scholar Innovation Project has been sanctioned with you as the Principal Coordinator. The project has been numbered as given below. Please quote this number in all your correspondence in respect of this project. This will facilitate easy identification for taking further action as may be necessary in respect of this project.

PROJECT NO. : BIO/14-15/834/RFRI/MADH
TITLE OF THE PROJECT : Lease of life from left overs
SPONSORING AGENCY : IC & SR Research Funds
VALUE OF THE PROJECT : Rs.5,20,000 /-
DURATION : 10 months (28.10.2014 - 27.08.2015)
FACULTY GUIDE : Dr. Madhulika Dixit
Dept. of Biotechnology
STUDENT : K Rathnakumar - BT09D032
Dept. of Biotechnology


C.T.E.O

To

Dr. Madhulika Dixit
Dept. of Biotechnology

Copy to:

K Rathnakumar - BT09D032
The Head, Dept. of Biotechnology
Dy. Registrar (F & A) Projects - copy of Dean's approval is enclosed

DESPATCHED

29 OCT 2014

o/c

**OFFICE OF THE DEAN ACADEMIC RESEARCH
INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI**

Proceedings of the Research Scholars Innovative Projects (RSIP) Committee Meeting held on 30th September 2014 at 2.00 p.m.

Members present:

Dr. Sarit K. Das	:	Chairman
Dr. Tanmay Basak	:	Member
Dr. Y. Shanthi Pavan	:	Member
Dr. A. Ramesh	:	Member
Dr. Guhan Jayaraman	:	Member
Dr. S. Kasiviswanathan	:	Member
Dr. K.B. Ramachandran	:	Member
Dr. A.K. Mishra	:	Member
Dr. N. Manoj	:	Member

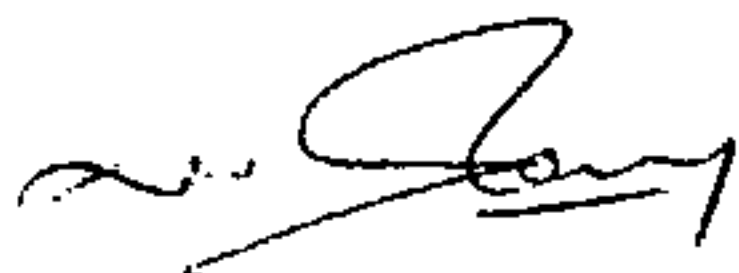
At the outset Dean Academic Research welcomed the members and highlighted the scheme details. The Committee reviewed all the 40 proposals received and recommends 13 proposals for presentation. Only 11 scholars presented their proposals. Based on the comments on the proposal and the presentation, the following 5 proposals were recommended for funding for a total value of Rs.25 lakhs.

S. No.	Name of the Student(s)	Name of the Mentor	Title	Value (Rs. In lakhs)
1	Ganesh Bapat, Nitin Kamble, Akshay Baviskar	Dr. Sujatha Srinivasan, ME	Exercise machine for users with lower limb disabilities	3,30,000
2	Debostuti Ghoshdastidar, Akhil Pratap Singh Chauhan, Md. Homaidur Rahman, Dibbendu Ghosh	Dr. Sanjib Senapati, BT, Dr. Ramesh L. Gardas, CY	A new generation nucleic acid storage medium based on hydrated ionic liquids.	3,00,000
3	K. Rathnakumar	Dr. Madhulika Dixit, BT	Lease of life from left overs	5,20,000
4	Pragyan P. Patnaik, Nivitha M.R, John Abraham	Dr. J.Murali Krishna, CE, Dr.C.V. Krishnamurthy, PH, Dr. Kavitha Arunachalam, ED	Nondestructive testing of bituminous pavements using electromagnetic techniques	5,00,000
5	Guru Venkat	Dr. Anil Prabakar, EE	Synchronized pump probe generation from wavelength stabilized mode locked fibre lasers	8,50,000

Dean may all see.
we may start the project using Rs.25 lakhs (int) - this is the case.
1/10/14
Bhandari
Cru
D. N. Manoj

Also put this award in a notice & email & Facebook
Py
R. N. Manoj

Director may kindly approve the recommendations. Funds will be provided from IC & SR.



Dr. N. Manoj



Dr. A.K. Mishra



Dr. K.B. Ramachandran



Dr. S. Kasiviswanathan



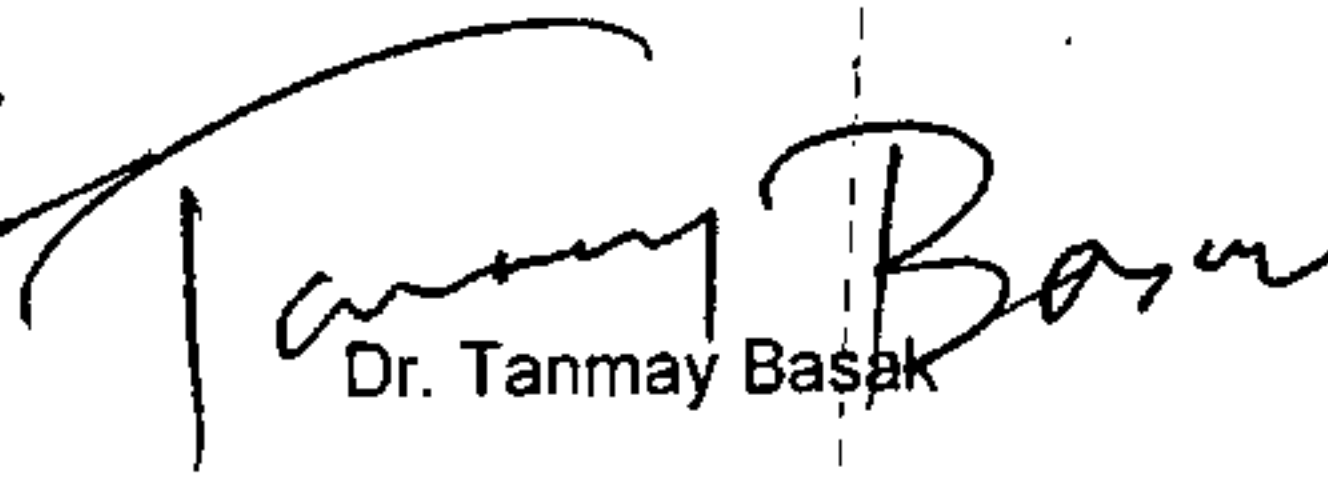
Dr. Guhan Jayaraman



Dr. A. Ramesh



Dr. Y. Shanthi Pavan



Dr. Tanmay Basak



Dr. Sarit K. Das



Director

1393
14/9/2014

CENTRE FOR IC & SR, IIT MADRAS

No: ICSR/087/2014/8371

20th October 2014

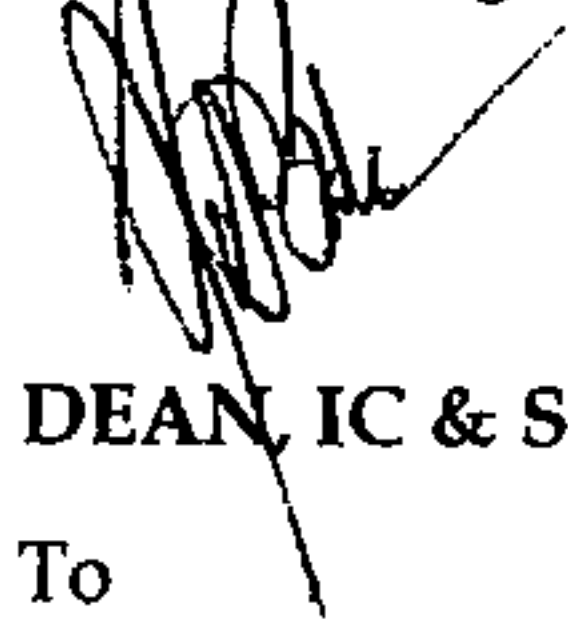
Dear Ratnakumar,

Sub: Research Scholar Innovation Project (RSIP)_2014 - reg.

Congratulations! The screening committee has approved your proposal on "Lease of life from left overs" for funding under the Research Scholar Innovative Students Project Programme, for a total value of Rs. 5.20 Lakhs.

While wishing you great success in the project, I request you to kindly inform IC & SR about the progress of the work periodically.

With best regards,



DEAN, IC & SR

To

K. Rathnakumar (BT09D032)
Dept. of Biotechnology

thru Dr. Madhulika Dixit, Dept. of Biotechnology (Guide)

py

21-10-14

10:00

R-

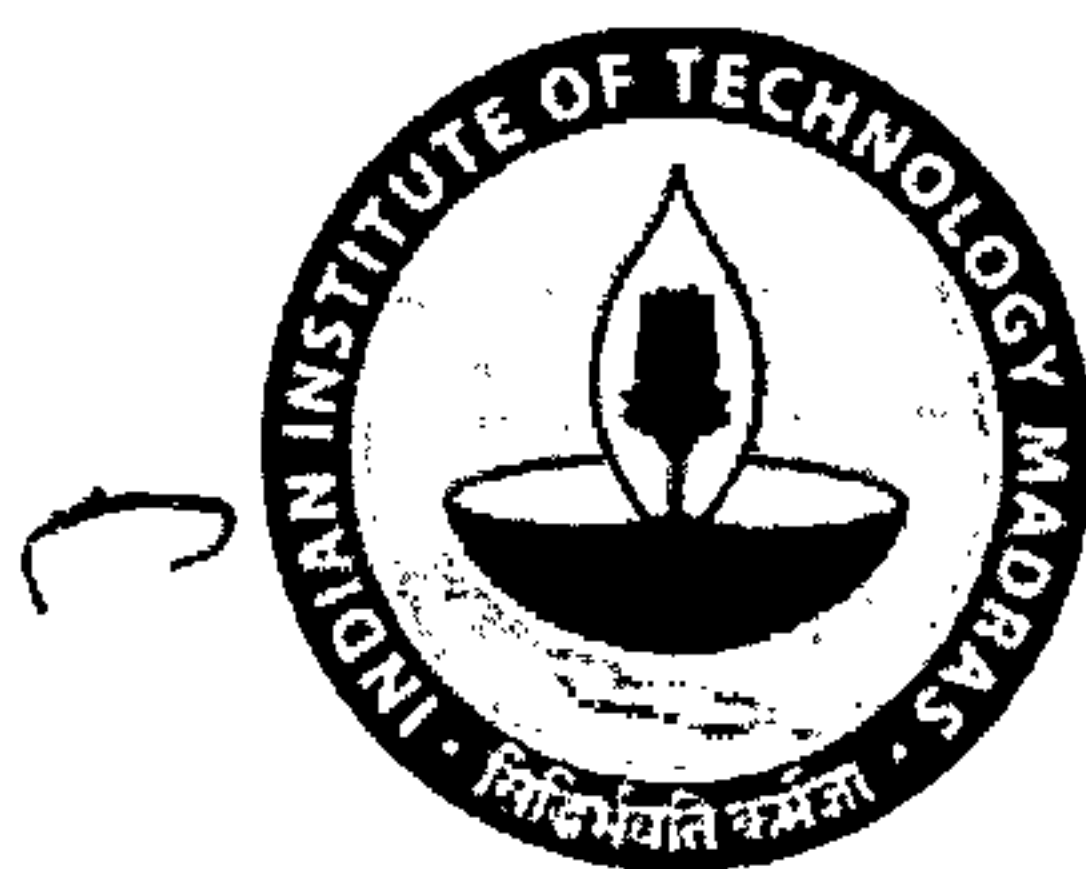
⑦

Proposal for Research Scholar Innovative Project

Submitted to

Centre for Industrial Consultancy and Sponsored Research.

IIT Madras



Submitted by

K.Rathnakumar

(BT09D032)

Ph.D Scholar

Department of Biotechnology

Project Supervisor: Dr.Madhulika Dixit

1. *Name of the student:* K.Rathnakumar
2. *Roll No:* BT09D032
3. *Degree & Department:* Ph.d. Biotechnology.
4. *Name of Faculty guide:* Dr.Madhulika Dixit
5. *Title of the Project:* "Lease of life from left overs"
6. *Scope of the Project:*

Our approach to produce adult mesenchymal stem cell- like cells from discarded umbilical cords has broad potential for personalized medicine. It could significantly reduce the cost and influence current strategies being exploited for therapeutic plasticity. We also believe it will open new avenues for use in drug discovery and cell based therapy.

7. *Methodology:*

Primary human endothelial cells will be isolated from umbilical cord samples. Gene knockdown protocol will require siRNA transfection using Lipofectamine 2000 and silencing will be confirmed by western blotting. Lineage tracing will be performed using FACS analysis after culturing in suitable differentiation media. Confirmation of differentiation potential will require scoring for candidate marker proteins for each lineage by western blot analysis.

8. *Duration of the Project (maximum of 10 months):* Six months

9. *Deliverables:*

- a. A novel strategy to generate adult mesenchymal like stem cells for regenerative medicine.
- b. Generation of Chondrocytes for cartilage repair for knee injury.
- c. Production of Osteoblast cells for bolstering regeneration of bones during osteoporosis or bone fracture.

10. Budget (only for fabrication work, Consumables, Contingencies):

S.NO	Consumables	Quantity	Unit price	Total (Rs)
1	Cell culture media			
	➤ Adipocyte differentiation media.	4 Nos	10000.00	40000.00
	➤ Chondrocyte differentiation media.	4Nos	10000.00	40000.00
	➤ Osteoblast differentiation media.	4Nos	10000.00	40000.00
	➤ Endothelial culture media.	5Nos	5000.00	25000.00
2.	SiRNA	2 Vial	15000.00	30000.00
3.	Lipofectamine 2000.	3 vials	30000.00	90000.00
4.	Antibodies.	10 vials	15000.00	1,50,000.00
5.	Culture dish	100 Flask	10000.00	10000.00
6.	Umbilical Cord Isolation	100 cords	600.00	60000.00
7.	Alizarin red	1 Vial	3000.00	3000.00
8.	Alcian blue	1 Vial	14000.00	14000.00
9.	Oil red stain.	1 Vial	2500.00	2500.00
	Grand total			5,20000.00

11. Innovation in the project: Generation of mesenchymal stem cells from bio medical waste.

K. Rathnakumar
Signature of the Student:

Dr. MADHULIKA DIXIT
Assistant Professor
Biotechnology Department
Indian Institute of Technology Madras
Chennai - 600 036, India.

[Signature]
Signature of the Guide:

[Signature]
Recommendation of the HOD: