Overview

The field of stem cell biology and regenerative medicine is rapidly moving toward translation to clinical practice. It integrates the knowledge and tools from biological sciences and engineering. Regeneration is the regrowth of a damaged organ part from the remaining tissue. Unfortunately, many other human tissues don’t regenerate, and a goal in regenerative medicine is to find ways to kick-start tissue regeneration in the body or to engineer replacement tissues. Human development depends intimately on stem cells, the mysterious precursor to every kind of cell in the body that, with proper instruction, can grow and differentiate into any new tissue or organ. Recent reports have suggested the more significant therapeutic effects of the anti-inflammatory, trophic, paracrine and immune-modulatory functions associated with the stem cells, which induce them to restore normal healing and tissue regeneration by modulating immune reactions, regulating inflammation, and suppressing fibrosis.

Course participants will learn these topics through lectures and tutorials.

<table>
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<tr>
<th>Modules</th>
<th>Duration : September 16th - 27th, 2019</th>
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<tbody>
<tr>
<td></td>
<td>Venue : Raman Auditorium, A.C Tech Campus, Anna University, Chennai</td>
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<td><em>(Number of participants for the course will be limited to 50)</em></td>
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<th>You Should Attend If…</th>
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<tr>
<td>• You are an engineer or scientist from Biological Sciences engaged in stem cell and tissue engineering research.</td>
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<tr>
<td>• You are a student (B.Tech/M.Tech/Ph.D/Post-Doctoral Fellows) or faculty from academic institution engaged in or interested in Redox biology.</td>
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<th>Fees</th>
<th>The participation fees for taking the course is as follows:</th>
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<tr>
<td></td>
<td>Academic Institutions Students - Rs. 1000/-</td>
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<tr>
<td></td>
<td>Academic Institutions Staff - Rs. 2000/-</td>
</tr>
<tr>
<td></td>
<td>Industry/ Research Organizations - Rs. 3000/-</td>
</tr>
<tr>
<td></td>
<td>Participants from abroad - US $500</td>
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The above fee includes all course material. The participants will be provided with accommodation on payment basis.
About Faculty

Dr Eustace Johnson, is a Professor, Biological Sciences, University of Chester, UK. He is an experimental cell biologist with expertise in immunology and adult stem cell therapies. His scientific interests are Cell and molecular biology of neural and connective tissue, particularly regarding the spine, and in developing cell-based therapies in regenerative medicine which involves the use of autologous adult stem cells to promote functional recovery following spinal cord injury, for tissue engineering of the bone and cartilaginous tissue, and to promote skin wound healing. He is also a founding and current member of the Mercia Stem Cell Alliance Steering Committee.

About Course Coordinator

Dr. C. D. Anuradha, M.Phil., PhD., is a Professor, Centre for Biotechnology, Anna University, Chennai. She has more than 25 years of research experience in the field of Stem cell technology, Cancer therapeutics and Cardiovascular therapy. She has more than 50 research articles in International peer-reviewed journals like JBC, PLOS and American Journal of Physiology and also has several ongoing research projects. She collaborates with various labs in the UK and USA and has a great passion for research in cell signalling mechanisms with special interest in stemcell and tissue engineering technology.
EXPERIMENTAL MODELS IN STEM CELLS & TISSUE REGENERATION

Overview

The field of stem cell biology and regenerative medicine is rapidly moving toward translation to clinical practice. It integrates the knowledge and tools from biological sciences and engineering. Regeneration is the regrowth of a damaged organ part from the remaining tissue. Unfortunately, many other human tissues don’t regenerate, and a goal in regenerative medicine is to find ways to kick-start tissue regeneration in the body or to engineer replacement tissues. Human development depends intimately on stem cells, the mysterious precursor to every kind of cell in the body that, with proper instruction, can grow and differentiate into any new tissue or organ. Recent reports have suggested the more significant therapeutic effects of the anti-inflammatory, trophic, paracrine and immune-modulatory functions associated with the stem cells, which induce them to restore normal healing and tissue regeneration by modulating immune reactions, regulating inflammation, and suppressing fibrosis.

Course Objectives

- This course will introduce students to fundamental concepts of experimental models in stem cells & tissue regeneration.
- The session will provide opportunity to our students to seek knowledge and to interact with the International faculty.
- The course will deliver high quality course material in niche areas, both through video and print that can be used by a larger body of students and teachers.

About Course Faculty

Dr. Eustace Johnson, is a Professor, Programme Director for masters programmes in stem cells and regenerative medicine, University of Chester, UK. He is an experimental cell biologist with expertise in immunology and adult stem cell therapies. His scientific interests are Cell and molecular biology of neural and connective tissue, particularly regarding: the spine, and in developing cell-based therapies in regenerative medicine which involves the use of autologous adult stem cells to promote functional recovery following spinal cord injury, for tissue engineering of the bone and cartilaginous tissue, and to promote skin wound healing. He is also a founding and current member of the Mercia Stem Cell Alliance Steering Committee.

About Course Coordinator

Dr. C. D. Anuradha, M.Phil., Ph.D., is a Professor, Centre for Biotechnology, Anna University, Chennai. She has more than 35 years of research experience in the field of Stem cell technology, Cancer therapeutics and Cardiovascular therapy. She has more than 50 research articles in International peer-reviewed journals like JBC, PLOS and American Journal of Physiology and also has several ongoing research projects. She collaborates with various labs in the UK and USA and has a great passion for research in cell signalling mechanisms with special interest in stem cell and tissue engineering technology.

Who can attend?

Faculty/Research Scientists from Academia/research organizations.
Students, Research scholars and Postdoctoral Fellows

Course Fees

Academic Students : Rs 1000/-
Academic Staff : Rs 2000/-
Research organization : Rs 3000/-
Abroad Participants : $500/-

Mode of payment

Demand Draft in favour of "The Director CTDT, Anna university" Payable at Chennai.

Date

September 16th - 27th 2019

Venue

Raman Auditorium,
A.C Tech Campus, Anna University,
Chennai, Tamil Nadu.

Contact

Dr. R. Murali: +91-9043267888
Mr. K. Vignesh: +91-9629058526
E-mail: augian2019@gmail.com

For further details visit http://ctdt.annauniv.edu/gian/
REGISTRATION FORM

Name (Block Letters) ..............................................................................................................................................
Age and Date of Birth ..................................................................................................................................................
Gender  □ Male  □ Female  □ Transgender
Educational qualification ................................................................................................................................................
Designation .................................................................................................................................................................
Experience ....................................................................................................................................................................
Institution ......................................................................................................................................................................
Address ........................................................................................................................................................................
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Mobile ........................................................................................................................................................................
E-mail ............................................................................................................................................................................
GIAN Application ID ..................................................................................................................................................
(Application Id Generated during One time registration at GIAN portal of IIT Kharagpur)
Course Fee:  □ Academic Institutions: Students - Rs.1000/-  □ Academic Institutions: Staffs - Rs. 2000/-  □ Industry/Research Organizations - Rs.3000/-  □ Participants from abroad - US $500/-

Payment should be made through:

Demand Draft in favor of “The Director CTDT, Anna University” payable at Chennai.
DD no: .............................................................................................................. Date: ................................................
Amount: .............................................................................................................. Bank: ................................................

Date:.................... Signature of Candidate

APPROVAL FROM INSTITUTION

Date:.................... Seal & Signature of the Principal/ Head of the Department/Division

*Send the registration form and Demand Draft through post to the course coordinator: Dr.C.D.ANURADHA, Professor, Centre for Biotechnology, Anna University, Chennai - 600025.

Please visit www.gian.iitkgp.ac.in and www.annauniv.edu/gian/ for more details.