

J.K.K.MUNIRAJAH MEDICAL RESEARCH FDUNDATIDN'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

Ethirmedu, B.Komarapalayam - 638 183, Namakkal Dist. Tamilnadu. India Approved by : Pharmacy Council of India. New Delhi & The TamilnaduDr.M.G.R Medical University, Chennai. Website :www.jkkmmrfpharmacy.edu.in[E-Mail: principal@jkkmmrfpharmacy.edu.in Contact No.: +919789456750, +919943069944, +919943066944

DATE:31.12.2021

DEPARTMENT OF PHARMACOLOGY REPORT

WORKSHOP ON ZIBRA FISH AS A EXPERIMENTAL MODEL VENUE: SEMINAR HALL

DATED:31/12/2021

RESOURCE PERSONS:

1. Dr.V.Suresh, M.PHARM, Ph.D.,

PROFESSOR, JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL COLLEGE OF PHARMACY,

KOMARAPALAYAM

2. Mr.G.Thamotharan., M.PHARM.,

ASSOCIATE PROFESSOR, JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM.

No. of students enrolled: 263

No. of students certified in our institution:17

No. of students certified: 258

Objective

Zebrafish has become a prominent vertebrate model for understanding pathophysiology of disease and has already contributed to several examples of successful phenotype-based drug discovery. These soft skill development program provides additional knowledge to the students other than their academic knowledge.

Learning outcomes:

- Provides knowledge on Zebrafish as a model for drug discovery platform.
- > Identify potential issues with Zebrafish animal model.

It Provides More Effective biomarker in pathophysiology of disease

Programme

Co-ordinator

Dr. N. SENTHILKUMAR, PRINCIPAL.

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY,

ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU.

Dr. N.SENTHIL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATIO ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMA

ETHIRMEDU, KOMARAPALAYAM - 638 183. NAMAKKAL DISTRICT, TAMILNADU, INDIA.



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REF.NO: JKKM/PP-/REQ/0000/001

Date: 01/11/2021

From

Department of Pharmacology

JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy.

Komarapalayam, Namakkal [Dist]

Tamil Nadu, PIN:638183.

To

The Principal,

JKKMMRF'S Annai JKK Sampoorani Ammal College of Pharmacy.

Komarapalayam, Namakkal [Dist]

Tamil Nadu, PIN:638183.

Respected Sir,

Subt: Requesting permission to conduct orkshop on Zibra fish as a experimental model regarding:-

With due respect, we kindly request you to grant us permission to conduct a seminar on15/12/2021 to 16/12/2021 in the topic Workshop on Zibra fish as a experimental model .We believe this will be informative session and useful for our students.

Kindly consider the above, we will be grateful to you sir.

Thank you

Yours sincerely,

Dr. N. SENTHILKUMAR, PRINCIPAL,



J.K.K.MUNIRAJAH MEDICAL RESEARCH FOUNDATION'S ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

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DEPARTMENT OF PHARAMACOLOGY

CIRCULAR

2021

This is inform to the students that the following soft skill development course can be conducted by the Department of Pharmacology, JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM and it will be commenced as per the schedule:

| Course Name | Date | FN | AN | Venue | Resource Person |
|--|--------------------------------|------------|------------|-----------------|--------------------------------------|
| Seminar on Zibra fish as a experimental model | 15/12/2021 to 16/12/2021 | IV B.PHARM | II B.PHARM | SEMINAR HALL | Dr.V.Suresh & Mr.G.Thamotharan |

All the above-mentioned students must enroll and actively participate in the course without fail.

NOTE: Certificates should be issued to all the students after completion of the course and examination.

NTHILKUMAR. Dr. N.SE PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY

ETHIRMEDU, KOMARAPALAYAM - 638 183.

NAMAKKAL DISTRICT. TAMILNADU. INDIA.

PRINCIPAL

Dr. N. SENTHILKUMAR, PRINCIPAL.



JKKMMRF'S JKK ANNAI SAMPOORANIAMMAL COLLEGE OF PHARMACY DEOARTMENT OF PHARMACOLOGY

Workshop on Zibra fish as a experimental model

RESOURCE PERSONS

I. DR.V.SURESH, M.PHARM, PH.D., PROFESSOR, JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM.

2. MR.G.THAMOTHARAN., M.PHARM., ASSOCIATE PROFESSOR, JKKMMRF'S ANNAI JKK SAMPOORANIAMMAL COLLEGE OF PHARMACY, KOMARAPALAYAM.

DATE: 15/12/2021 to 16/12/2021

VENUE: SEMINAR HALL

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WORKSHOP ON ZIBRAFISH AS AN EXPERIMENTAL MODEL







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Workshop on Zibra fish as a experimental model

Introduction

This is a two day workshop intended to help you understand the use of zebrafish (*Daniorerio*) models in scientific research and to provide training in development of zebrafish models. The workshop includes introductory lectures on zebrafish models and hands-on

practical sessions on induction of zebrafish models.

Zebrafish has become a prominent vertebrate model for understanding pathophysiology of disease and has already contributed to several examples of successful phenotypebased drug discovery. By combining the scale and throughput of in vitro screens with the physiological complexity of animal studies, the zebrafish promises to contribute to several aspects of the drug development process including target identification, disease modelling, lead discovery and toxicology

Objectives

- Demonstrate a hands on method in using zebrafish as a discovery platform
- Make zebrafish models as per the latest industry and research trends
- Read end points from zebrafish model to discover market fit drugs

Exploratory-Based Models

Zebrafishbehavioral assays are currently used for high-throughput phenotyping and testing of various psychotropic drugs. A popular method of behavioral analysis in zebrafish research is the novel tank test, conceptually similar to the open field test used for rodents, which exhibit anxiety-like behavior by staying close to the walls (thigmotaxis), but increase exploration as they become acclimated to the new environment. Similarly, exposure to a novel environment evokes a robust anxiety response in zebrasfish, as they dive to the bottom (geotaxis) until they feel safe to swim in the upper regions ofthe tank. Typical endpoints in this test include the latency to enter the top, the number of transitions to the top, time spent in top, top:bottom time ratio, the number of fear/escape-like erratic movements, as well as freezing frequency and duration.

Zebrafish habituation behavior

Relevant to both exploration and emotionality, habituation is the simplest form of learning, and has long been used to examine animal cognitive phenotypes. Habituation to novelty represents attenuation of innate behaviors, as subjects become accustomed to the environment. Intra-session habituation reflects spatial working memory, whereas inter-session habituation is commonly used to assess middle- and longterm spatial memory. Despite being widely studied in various rodents, habituation has not been extensively evaluated in zebrafish until recently

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| SEMINAF | FEEDB | ACK | FORM |
|---------|-------|-----|------|
|---------|-------|-----|------|

STUDENT NAME:

DATE: 15/12/2021-16/12/2021

YEAR/ COURSE :

NAME OF THE WORKSHOP:

COURSE CODE:

DURATION:

EVALUATE HONESTLY:

| Questions | Excellent | Good | Fair | Poor |
|--|-----------|------|------|------|
| The objectives of the training were | | | | |
| The instructor's contribution to the course was: | | | | |
| | | | | |
| The presentation materials were relevant | | | | |
| The instructor's effectiveness in teaching the subject matter was: | | | | |
| Answers to the students questions by the instructor | | | | |
| The venue was appropriate for the event | | | | |
| Course organisation was: | | | | |
| Level of course was | | | | |
| | | | | |
| Course content was: | | | | |

Student Participation

On average, how many hours a week did you spend on this course (in and out of class)?
 A)0-2 B) 2-5 C)6-10 D)11-14 E)15UP

What grade do you expect in this course?
 A)BELOW 50% B) 50-60% C) 60-70% D) 70-80% E) ABOVE 80%

SIGNATURE

Dr. N. SENTHILKUMAR, PRINCIPAL,



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STUDENT FEEDBACK FORM

| NAME OF STUDENT: | |
|------------------|--|
| COURSE: | |
| SEMINAR TOPIC: | |

REGISTRATION NO: YEAR & SEMESTER: DATE & TIME:

| | 1. | Ove | erall, how satisfied were you with this seminar? |
|----|----|------------------|---|
| | | (| Very satisfied |
| | | - | Satisfied |
| | | (| Neutral |
| | | C | Dissatisfied |
| | | C | Very dissatisfied |
| 2. | | Ho | w clear were the ideas and concepts we presented? |
| | | - | Extremely clear |
| | | C | Very clear |
| | | C | Moderately clear |
| | | C | Not very clear |
| | | C | Not at all clear |
| 3. | | W | hat percentage of the information was new to you? |
| | | C | 100% |
| | | C | 75% |
| | | 0 | 50% |
| | | C | 25% |
| | | pan _k | |

How informative did you find our seminar?

Extremely Informative

Moderately Informative

Not very informative

Not informative at all

Very Informative

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| 5. sem | Were there any technical issues that prevented you from seeing or hearing the inar? |
|-----------|---|
| 2 | Yes |
| 6. | No Would you like to learn more about this topic? |
| | Yes |
| 7. | No Rate the content of the slides/virtual aid? |
| | Extremely clear |
| | C Very clear |
| | Moderately clear |
| | Not very clear |
| 8. | Not at all clear How accurate was the session description? |
| | Extremely clear |
| | Very clear |
| | Moderately clear |
| | Not very clear |
| 9. | Not at all clear How did the session compare to your expectations? |
| | Excellent |
| | Good |
| | C Fair |
| | Poor |
| 10 | Not at all clear How Would you rate the content of the seminar? |
| | C 1 |
| | C 2 |
| | C 3 |
| | C 4 |
| | C 5 |
| | Student Name With Signature |
| | |



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STUDENTS FEEDBACK ANALYSIS

DATE: 16/12/2021-

| S.NO | QUESTION DESCRIPTION | ANSWERS | MARKS | TOTAL MARKS |
|------|---------------------------------------|---------------------------|-------|-------------|
| | Satisfaction | Very satisfied | 5 | |
| | | Satisfied | 3 | • |
| 1 | | Neutral | 2 | 5 |
| | | Dissatisfied | 1 | |
| | | Very dissatisfied | 0 | |
| | | Extremely clear | 5 | |
| | | Very clear | 4 | |
| 2 | Clarity | Moderately clear | 2 | 5 |
| | | Not very clear | 1 | |
| | | Not at all clear | 0 | |
| | Percentage of the information was new | 100% | 5 | |
| | | 75% | 4 | 5 |
| 3 | | 50% | 3 | |
| | | 25% | 2 | |
| | | 0% | 1 | |
| | | Extremely Informative | 5 | 5 |
| | Informative | Very Informative | 3 | |
| 4 | | Moderately Informative | 2 | |
| | | Not very informative | 1 | |
| | | Not informative at all | 0 | |
| 5 | Technical issues | Yes | 5 | 5 |
| 5 | 1 ECHILICAL ISSUES | No | 0 | 3 |
| 6 | Like to learn more about this | Yes | (5) | 5 |

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| | 1 ! - | No | 0 | |
|----|---------------------------------|------------------|---|--|
| | topic | Extremely clear | 5 | |
| | | Very clear | 3 | |
| | Rate the content of the | Moderately clear | 2 | _ 5 |
| 7 | slides/virtual aid | Not very clear | 1 | |
| | | Not at all clear | 0 | |
| - | | Extremely clear | 5 | |
| | | Very clear | 3 | |
| | Accuracy of the sessions | Moderately clear | 2 | 5 |
| 8 | | Not very clear | 1 | W III |
| | | Not at all clear | 0 | |
| - | Session expectations | Excellent | 5 | |
| | | Good | 3 | |
| H | | Fair | 2 | 5 |
| 9 | | Poor | 1 | |
| | | Not at all clear | 0 | • |
| | | 1 | 1 | |
| 10 | | 2 | 2 | |
| | Rate the content of the seminar | 3 | 3 | 5 |
| | | 4 | 4 | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 |
| | | 5 | 5 | |

Total marks = 50

Head Of the Department

Principal

Dr. N. SENTHILKUMAR, PRINCIPAL,



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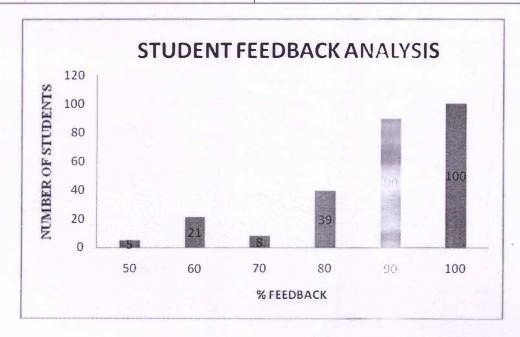
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REPORT SUMMARY

Feedback Question Analysis - Question Asked-Feedback Rating

| 1.Satisfaction | 6.Like to learn more about this topic | | |
|--|--|--|--|
| 2.Clarity | 7.Rate the content of the slides/virtual aid | | |
| 3. Percentage of the information was new | 8.Accuracy of the sessions | | |
| 4.Informative | 9.Session expectations | | |
| 5.Technical issues | 10.Rate the content of the seminar | | |
| 5.Technical issues | 10.Rate the content of the seminar | | |



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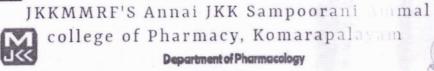
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LIST OF PARTICIPANTS

| 1 | VARUNKUMAR S | SEM-III |
|----|------------------|---------|
| 2 | VEERAYUVARAJ P * | SEM-III |
| 3 | VENKATESH G | SEM-III |
| 4 | VENKATESH S | SEM-III |
| 5 | VIGNESH K * | SEM-III |
| 6 | VIGNESH R | SEM-III |
| 7 | VIGNESHWARAN R * | SEM-III |
| 8 | VIJAY R* | SEM-III |
| 9 | VISHWA S | SEM-III |
| 10 | YASAR ARAFATH H | SEM-III |
| 11 | ARULKUMAR G | SEM-III |
| 12 | BALAMURUGAN S | SEM-III |
| 13 | HEMAVARSHINY K | SEM-III |
| 14 | KANNAN M | SEM-III |
| 15 | KARTHIK K | SEM-III |
| 16 | LOKESH R | SEM-III |
| 17 | NAVEENKUMAR M | SEM-III |

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Workshop

Certificate of Participant

Has appreciated for his / her participation in the Work Zibra fish as a experimental model organized by the de-of Pharmacology on (15.12.2021 to 16.12.2021).

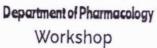
convenor

Organ

secre

Dr. N. SENTHILKUMAR, PRINCIPAL.

JKKMMRF'S Annai JKK Sampoorani Ammal college of Pharmacy, Komarapalayam





Certificate of Participant

YASAR PRAFATH. H

Has appreciated for his / her participation in the Work Shop on Zibra fish as a experimental model organized by the department of Pharmacology on (15.12.2021

to 16.12.2021).

convenor

CARREL OF THE PARTY OF THE PART

Organizing secretary

Dr. N. SENTHILKUMAR, PRINCIPAL.



JKKMMRF'S Annai JKK Sampoorani Ammal college of Pharmacy, Komarapalayam

Department of Pharmacology Workshop



Certificate of Participant

KANNON. M

Has appreciated for his / her participation in the Work Shop on Zibra fish as a experimental model organized by the department of Pharmacology on (15.12.2021).

convenor

State of the state

Organiz**ing** secretary

Dr. N. SENTHILKUMAR, PRINCIPAL.