

II LATIN AMERICAN COURSE OF NEUROEPIDEMIOLOGY

VENUE:

**CENTRO UNIVERSITARIO REGIONAL (C.U.R.E.)
PUNTA DEL ESTE - MALDONADO - URUGUAY**

ORGANIZATION:

**SPECIALTY GROUP ON NEUROEPIDEMIOLOGY, WORLD
FEDERATION OF NEUROLOGY**

**SECCIÓN NEUROEPIDEMIOLOGÍA, INSTITUTO DE NEUROLOGÍA,
MONTEVIDEO, URUGUAY**

**CENTRO UNIVERSITARIO REGIONAL DEL ESTE (C.U.R.E.),
UNIVERSIDAD DE LA REPÚBLICA**

ENDORSEMENTS (to request):

- **COMITÉ EJECUTIVO DE LACTRIMS**
- **SOCIEDAD PANAMERICANA DE NEUROEPIDEMIOLOGÍA**
- **F.I.N.E.P. (Fundación para la Investigación en Neuroepidemiología),
JUNÍN, ARGENTINA**
- **SOCIEDAD URUGUAYA DE NEUROLOGÍA**
- **FACULTAD DE MEDICINA, UNIVERSIDAD DE LA REPÚBLICA**
- **WORLD FEDERATION OF NEUROLOGY**
- **INTENDENCIA MUNICIPAL DE MALDONADO**
- **MINISTERIO DE EDUCACIÓN Y CULTURA**
- **MINISTERIO DE TURISMO**

COORDINATION:

- **Dr. Carlos N. Ketzoian (Uruguay)**
SECCIÓN NEUROEPIDEMIOLOGÍA, INSTITUTO DE NEUROLOGÍA
- **Dr. Fernando Gracia (Panamá)**
VICE PRESIDENT OF LACTRIMS - UNIVERSIDAD INTERAMERICANA DE PANAMÁ
- **Dr. Mario O. Melcon (Argentina)**
*EPIDEMIOLOGY COORDINATOR APPOINTED TO THE EXECUTIVE COMMITTEE
OF LACTRIMS - F.I.N.E.P. (Fundación para la Investigación en Neuroepidemiología) –
JUNIN – ARGENTINA*
- **Dra. Regina Alvarenga Papais**
*PROFESSOR OF NEUROLOGY – FEDERAL UNIVERSITY OF THE STATE OF RÍO DE
JANEIRO (UNIRIO) BRAZIL*

LOCAL COORDINATION GROUP:

- **Dr. Fabián Gómez**
- **Dra. Valeria Rocha**
- **Dra. Noelia Sorondo**
- **Dra. Lucía Castro**

TEACHING TEAM:

- **Professor WALTER A. ROCCA**
M.D., M.P.H., PROFESSOR OF EPIDEMIOLOGY AND NEUROLOGY, MAYO CLINIC, COLLEGE OF MEDICINE AND CO-DIRECTOR OF THE ROCHESTER EPIDEMIOLOGY PROJECT, ROCHESTER, MINNESOTA, U.S.A.
- **Professor GIANCARLO LOGROSCINO**
DIRECTOR OF THE DEPARTMENT OF CLINICAL RESEARCH IN NEUROLOGY, UNIVERSITY OF BARI, FONDAZIONE PANICO TRICASE, ITALY.
- **Professor PIERRE MARIE PREUX**
DIRECTOR OF THE INSTITUT OF NEUROEPIDEMIOLOGY AND TROPICAL NEUROLOGY (IENT), LIMOGES, FRANCE.
- **Professor RUTH OTTMAN**
Ph. D. PROFESSOR OF EPIDEMIOLOGY IN NEUROLOGY AND THE SERGIEVSKY CENTER. DEPUTY DIRECTOR FOR RESEARCH, G.H. SERGIEVSKY CENTER. COLUMBIA UNIVERSITY. NEW YORK. U.S.A.
- **Professor FELICITY ENDERS**
Ph. D. PROFESSOR OF BIostatISTICS, MAYO CLINIC COLLEGE OF MEDICINE, ROCHESTER, MINNESOTA, U.S.A.

GUEST SPEAKERS:

- **Professor Riadh Gouider (Tunisia) – World Federation of Neurology - Trustee**
- **Professor Regina Alvarenga Papais (Brasil) – University of R o de Janeiro**
- **Professor Sergio Baranzini (U.S.A.)**
- **Professor Jorge Correale (Argentine)**

Language

The course will be taught in English.

The conferences will be in English, Portuguese or Spanish.

Objectives of the course

- To discuss the characteristics of different types of surveys: population surveys, analytic studies and clinical trials, with particular emphasis in multiple sclerosis.
- To introduce to genetic epidemiology and to understand the bases of gene-environment interaction.
- To review the main aspects of statistics applied to epidemiological research, with emphasis on importance versus significance, and confounding factors and interaction.
- To exchange experiences and opinions between researchers on MS in Latin America, and introduce the discussion about the opportunity and feasibility of a multicentric survey in the region.
- To give the opportunity to discuss neuroepidemiological studies in different processing phases (preparation, implementation, data analysis, etc.) with researchers with experience

The complex building of current clinical research continues to stand on four methodological pillars – the population surveys, the case-control study, the cohort study

and the clinical trial. These four methods, along with their combinations and modifications, enable us to investigate any possible cause-effect relationship across 1) biological, personal, or social factors or events, 2) symptoms, diseases, or conditions, and 3) treatments, procedures, or interventions. This 5 day course provides a review to the four methods, with emphasis on their complementarities and their relative strengths and weaknesses. As such, the course will enable the participants to better understand how evidence is constructed in clinical research. Participants will improve their ability to design, conduct, and interpret studies, and to write and read scientific papers and grant applications.

Methodology

The course methodology is based on:

- Lectures
- Example's discussion about different types of surveys
- Analysis of papers published with different study's designs
- Presentation of neuroepidemiological surveys carried on Latin America by the authors
- Discussion in workshops
- Conferences

A syllabus will be distributed to participants

Participants

Minimum 30

Maximum 50

Program

DAY 1 – SUNDAY 03/15/2020

ARRIVAL AND ACCOMMODATION

DAY 2 – MONDAY 03/16/2020

Morning – SURVEYS IN NEUROEPIDEMIOLOGY (8:30 – 12:15)

8:30 – 8:40 – WELCOME

8:40 – 9:00 – INTRODUCTION TO THE COURSE

9:00 – 9:45 – BASIC IDEAS AND TERMINOLOGY

9:45 – 10:30 – POPULATION SURVEYS (PART 1)

10:30 – 11:00 – Coffee Break

11:00 – 11:45 – POPULATION SURVEYS (PART 2)

11:45 – 12:15 – GENERAL DISCUSSION

12:15 – 14:00 – Lunch Break

Afternoon – (14:00 – 18:30)

14:00 – 16:15 – HOW TO READ A PAPER – a descriptive survey

16:15 – 16:30 – Coffee Break

16:30 – 17:15 – NEUROEPIDEMIOLOGIC STUDIES IN DEVELOPING COUNTRIES

17:15 – 18:00 – OPENING CONFERENCE: EPIDEMIOLOGY OF MS: LESSONS FROM AFRICA AND MIDDLE EAST – PROFESSOR RIADH GOUIDER – WFN TRUSTEE

18:00 – 18:30 – GENERAL DISCUSSION

DAY 3 – TUESDAY 03/17/2020

Morning – ANALYTIC STUDIES (9:00 – 12:15)

9:00 – 9:45 – ANALYTIC STUDIES: OVERVIEW

9:45 – 10:30 – CASE-CONTROL STUDIES

10:30 – 11:00 – Coffee Break

11:00 – 11:45 – COHORT STUDIES

11:45 – 12:15 – GENERAL DISCUSSION

12:15 – 14:00 – Lunch Break

Afternoon – (14:00 – 18:30)

14:00 – 16:15 – HOW TO READ A PAPER – a case-control study

16:15 – 16:45 – Coffee Break

16:45 – 17:30 – CAPTURE – RECAPTURE METHOD

17:30 – 18:15 – CONFERENCE: WHAT POSSIBILITIES OF RESEARCH TRAINING IN NEUROEPIDEMIOLOGY IN LATIN AMERICA? THE EXPERIENCE OF THE UNIVERSITY OF RÍO DE JANEIRO – PROFESSOR REGINA ALVARENGA PAPAÍS (UNIRIO)

18:15 – 18:30 – GENERAL DISCUSSION

DAY 4 – WEDNESDAY 03/18/2020

Morning – CLINICAL TRIALS (9:00 – 12:15)

9:00 – 10:30 – CLINICAL TRIALS

10:30 – 11:00 – Coffee Break

11:00 – 11:30 – INFERENCES FROM EPIDEMIOLOGIC RESEARCHES

11:30 – 12:15 – GENERAL DISCUSSION

12:15 – 14:00 – Lunch Break

Afternoon – (14:00 – 18:30)

14:00 – 16:15 – HOW TO READ A PAPER – a cohort study

16:15 – 16:30 – Coffee Break

16:30 – 17:15 – CONFERENCE: COLLABORATIVE STUDIES IN MULTIPLE SCLEROSIS IN CENTRAL AMERICA: THE EXPERIENCE OF FOCEM – PROFESSOR FERNANDO GRACIA (PANAMÁ)

17:15 – 17:30 – NEUROEPIDEMIOLOGY OF M.S. IN PARAGUAY

17:30 – 17:45 – INCIDENCE OF MS IN URUGUAY. PRELIMINARY RESULTS - EMELAC URUGUAY

17:45 – 18:15 – EPIDEMIOLOGY OF NMO IN RÍO DE JANEIRO – PROFESSOR REGINA ALVARENGA

18:15 – 18:30 – GENERAL DISCUSSION

DAY 5 – THURSDAY 03/19/2020

Morning – GENETIC EPIDEMIOLOGY (9:00 – 12:15)

9:00 – 10:30 – INTRODUCTION TO GENETIC EPIDEMIOLOGY (PART 1)

10:30 – 11:00 – Coffee Break

11:00 – 11:45 – INTRODUCTION TO GENETIC EPIDEMIOLOGY (PART 2)

11:45 – 12:15 – GENERAL DISCUSSION

12:15 – 14:00 – Lunch Break

Afternoon – (14:00 – 18:30)

14:00 – 16:15 – HOW TO READ A PAPER – a clinical trial

16:15 – 16:45 – Coffee Break

16:45 – 17:30 – GENE-ENVIRONMENT INTERACTION

17:30 - 18:00 – NEUROEPIDEMIOLOGY OF MS IN ARGENTINA – PROFESSOR MARIO O. MELCON

18:00 – 18:30 – GENERAL DISCUSSION

DAY 6 – FRIDAY 03/20/2020

Morning – STATISTICS AND EPIDEMIOLOGY (9:00 – 12:15)

9:00 – 9:45 – USE AND MISUSE OF STATISTICS IN EPIDEMIOLOGY

9:45 – 10:30 – IMPORTANCE VERSUS SIGNIFICANCE

10:30 – 11:00 – Coffee Break

11:00 – 11:45 – CONFOUNDING AND INTERACTION

11:45 – 12:15 – GENERAL DISCUSSION

12:15 – 14:00 – Lunch Break

14:00 – 14:45 – CONFERENCE: "INTEGRATION OF ELECTRONIC MEDICAL RECORDS WITH A KNOWLEDGE NETWORK TO ENABLE MULTI-SCALE UNDERSTANDING OF NEUROLOGICAL DISEASES" – PROFESSOR SERGIO BARANZINI (U.S.A.)

14:45 – 15:30 – CONFERENCE: “EL IMPACTO DE LOS FACTORES AMBIENTALES EN EL DESARROLLO Y CURSO DE ESCLEROSIS MÚLTIPLE” – PROFESSOR JORGE CORREALE (Argentina)

15:30 – 16:15 – SURVIVAL STUDIES

16:15 – 16:45 – Coffee Break

16:45 – 17:30 – SURVIVAL STUDIES: EXERCISES

17:30 – 18:00 - CLOSURE OF THE COURSE

DAY 7 – SATURDAY 03/21/2020 DEPARTURE