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INSERM U288
91 Bd de l'Hôpital
Paris 75013 FRANCE

TEL: 33-1-40-77-97-13
FAX: 33-1-40-77-97-90

Research Descriptors

Development	Physiology	Serotonergic receptors
Pharmacology	Respiration	Unit activity

Areas of Research

Sleep and wakefulness in rats and cats. Physiology and pharmacology. Breathing patterns in newborn kittens. Unit activity of raphe dorsalis and locus coeruleus. Serotonergic receptors, breathing patterns, development.

Helen Baghdoyan
Dept. of Anesthesia
College of Medicine
Penn State University
Hershey, PA 17033 USA

TEL: 1-717-531-8433
FAX: 1-717-531-6221

Research Descriptors

Microdialysis	Polygraphic recordings	Receptor binding
Microinjection	Receptor autoradiography	

Areas of Research

Cholinergic mechanisms regulating the generation of sleep and wakefulness—of particular interest is the role of cholinergic receptors.

Odile Benoit
Étude du Sommeil
Bâtiment Pharmacie
La Salpêtrière
47, Bd de l'Hôpital
Paris 75651 Cedex 13 FRANCE

TEL: 33-1-45-70-32-20
FAX: 33-1-45-86-30-32

Research Descriptors

Actigraphy	Chronobiology	Shift-work problems
Automatic sleep scoring	Humans	Sleep/alertness patterns
Bright light	Hypnotics	

Areas of Research

Influence of circadian factors in sleep-wake regulation in human and experimental studies, field studies (shift-work), and medical studies (insomnia and circadian sleep-wake disorders). Influence of bright light exposure during 36-hour constant routine protocols. Other contact: Dr. Jean Foret.

Ralph Berger
Sinsheimer Laboratories
Dept. of Biology
University of California
Santa Cruz, CA 95064 USA

TEL: 1-408-459-2210
FAX: 1-408-459-3139

Research Descriptors

Continuous light	Metabolism	Power spectra
Melatonin	Pigeon	Thermoregulation

Areas of Research

Role of melatonin in the regulation of sleep and circadian rhythms of body temperature in the pigeon. Thermoregulation, metabolism, continuous light and power spectra.

Michel Billiard
Unité des Troubles du Sommeil
Service de Neurologie B
Hôpital Gui de Chauliac
Montpellier 34059 FRANCE

TEL: 33-67-33-74-13
FAX: 33-67-33-67-70

Research Descriptors

Daytime somnolence	Kleine-Levin Syndrome	Sleep perception
Genetics	Narcolepsy	Snoring
Idiopathic hypersomnia	Periodic limb movements	

Areas of Research

Genetics of narcolepsy and idiopathic hypersomnia. Daytime somnolence in sleep apneic subjects. Night awakenings in insomniac subjects. Periodic limb movements and hypersomnia.

Alexander Borbély
Dept. of Pharmacology
University of Zürich
Gloriastrasse 32
Zürich CH-8006
SWITZERLAND

TEL: 41-1-257-2676
FAX: 41-1-261-5684

Research Descriptors

Circadian rhythms	Pharmacology	Sleep regulation
EEG analysis	Physiology	Thermoregulation
Modelling	Sleep deprivation	

Areas of Research

Sleep regulation in humans and animals. EEG analysis. Modelling. Also studied are phylogeny of sleep, circadian rhythms and sleep pharmacology.

Mary Carskadon
Sleep Research Laboratory
Dept. of Psychiatry
Bradley Hospital
1011 Veterans Mem. Pkwy.
East Providence, RI 02915 USA

TEL: 1-401-421-9440
FAX: 1-401-453-3578

Research Descriptors

Actigraphy	Development	Sleepiness
Apnea	Humans	
Circadian rhythms	Puberty	

Areas of Research

Sleep-disordered breathing as a function of age and sex as well as menopausal status. Actigraphic assessment of sleep and wakefulness in infants and children. Sleep and wakefulness and circadian rhythms during puberty and in adults. Daytime sleepiness in children.

Michael Chase
Brain Research Institute
UCLA School of Medicine
Los Angeles, CA 90024-1761
USA

TEL: 1-310-825-3417
FAX: 1-310-206-3499

Research Descriptors

Brainstem	Intracellular recording	Postsynaptic excitation
Cortex	Microiontophoresis	Postsynaptic inhibition
Gene expression	Motoneurons	Spinal cord
Immunohistochemistry	Neurotransmitters	

Areas of Research

Motor control during sleep. Brainstem and cortical mechanisms. Intracellular recording in the chronic cat; microiontophoresis of neurotransmitter agonists and antagonists. Studies are also being conducted in Uruguay under the direction of Dr. Francisco Morales.

Anton Coenen
NICI/Dept. of Psychology
University of Nijmegen
P.O. Box 9104
6500 HE Nijmegen
THE NETHERLANDS

TEL: 31-80-61-25-45
FAX: 31-80-61-59-38

Research Descriptors

Absence epilepsy	EEG (phasic and	Neuropsychology
Automatic sleep scoring	evoked potentials)	REM sleep and deprivation
Behavioral pharmacology	Hypnotics	

Areas of Research

Sleep-wake states in rats. Deprivations of REM sleep in particular. Phasic events in the EEG in relation to absence epilepsy. Hypnotics, with emphasis on benzodiazepines. Sleep, memory and cognition; cats. Other contact: Gilles van Lujtelaar.

René Drucker-Colín
Dept. of Neurociencias
Inst. Fisiología Celular
UNAM
APDO. Postal 70-600
México D.F. 04510 MÉXICO

TEL: 52-5-550-2920
FAX: 52-5-548-0387

Research Descriptors

Acetylcholine	Cholecistokynine	Sensory stimulation
C-fos proto-oncogene	REM sleep	Vasoactive intestinal peptide

Areas of Research

Role of gastropancreatic peptides in the regulation of sleep. Role of sensory stimulation as an inducer of REM sleep, the mechanism of which is being studied through techniques of molecular biology. Cholecistokynine, c-fos proto-oncogene. Alternate TEL: 525-550-5215 x4839; alternate FAX: 525-550-2920.

J. Christian Gillin
Dept. of Psychiatry (0603)
University of California,
San Diego
9500 Gilman Drive
La Jolla, CA 92093-0603 USA

TEL: 1-619-534-2137
FAX: 1-619-458-4201

Research Descriptors

Alcoholism	Cholinergic systems	Humans
Aminergic systems	Cocaine	Pharmacology
Amphetamine	Depression	Psychiatric disorders

Areas of Research

Cholinergic mechanisms. Effects of auditory stimulation. Sleep in psychiatric patients (depression, alcohol, substance abuse). PET scans with glucose metabolism. Also being studied are alcohol, cocaine, amphetamines and sleep.

Ronald Harper
Department of Anatomy
and Cell Biology
UCLA School of Medicine
10833 Le Conte Ave.
Los Angeles, CA 90024 USA

TEL: 1-310-825-5303
FAX: 1-310-206-5855

Research Descriptors

Cardiac activity	Computers	Optical recording
Chaos	Imaging	Respiration

Areas of Research

Optical imaging of neural tissue during sleep in cats. Single neuron recording of cardiac and respiratory-related structures during sleep. Non-linear computations of physiological signals. Chaos, computers, imaging.

Osamu Hayaishi
Osaka Bioscience Institute
6-2-4, Furuedai
Suita, Osaka 565 JAPAN

TEL: 81-6-872-4810
FAX: 81-6-872-4818

Research Descriptors

Monkeys	Rats	Wakefulness-inducing
Prostaglandins D ₂ and E ₂	Sleep-promoting substances	substances

Areas of Research

Biochemical, molecular and genetic studies of the mechanisms of sleep-wake regulation, in particular those controlled by prostaglandins D₂ and E₂ and related compounds. Sleep-promoting substances, wakefulness-inducing substances.

Shojiro Inoué
Inst. Med. Dental Engrg.
Tokyo Med. Dental Univ.
2-3-10 Kanda-Surugadai
Chiyoda-ku
Tokyo 101 JAPAN

TEL: 81-3-3291-9881
FAX: 81-3-3291-3727

Research Descriptors

Brain temperature	Intracerebroventricular	Rat sleep assay
Circadian rhythms	infusion	Sleep factors
Forced locomotion	Neuronal activity	Time series analysis

Areas of Research

Sleep-modulatory activities of different putative sleep substances; techniques include long-term intracerebroventricular infusion in unrestrained rats. Analysis of interactions between humoral and neural systems involved in the regulation of sleep.

Barbara Jones
Dept. of Neurol. & Neurosurg.
Montreal Neurological Institute
McGill University, Room 821PW
3801 University Street
Montreal, Quebec H3A 2B4
CANADA

TEL: 1-514-398-1913
FAX: 1-514-398-8106

Research Descriptors

Cholinergic systems	Immunohistochemistry	Neurophysiology
GABA neurons	Monoaminergic systems	Reticular activating
Histochemistry	Neuroanatomy	system

Areas of Research

Chemoanatomical substrate of mechanisms of sleep-wake cycle. Neuroanatomy, histochemistry, immunohistochemistry, neurophysiology, cholinergic systems, monoaminergic systems, GABA neurons, reticular activating system.

Michel Jouvet
Dept. of Exp. Medicine
Claude Bernard University
8 Avenue Rockefeller
Lyon 69008 FRANCE

TEL: 33-78-77-70-41
FAX: 33-78-77-71-58

Research Descriptors

Hypothermia and	Peptides	Voltametry
paranormal sleep	Stress and PS rebound	
Neuroanatomy	Unit activity	

Areas of Research

Immunohistochemistry of the brain of cats and rats. Stress and sleep—voltametric studies. Electrophysiology of brainstem neurons related to paranormal sleep. Interrelationship between glia cells and neurons during sleep. Other contacts: Dr. Jean Louis Valatx; Dr. Raymond Cespuglio; Dr. Kazuya Sakai.

Thomas Kilduff
Sleep Disorders Center
Dept. of Psychiatry TD114
School of Medicine
Stanford University
Stanford, CA 94305 USA

TEL: 1-415-723-9380
FAX: 1-415-725-5356

Research Descriptors

Cerebral metabolism	Hibernation	Northern analyses
Circadian rhythms	In situ hybridization	
Gene expression	Molecular neurobiology	

Areas of Research

Neural and molecular bases of arousal state changes and circadian rhythmicity. Immediate early gene expression and target genes regulated by the IEGs. cDNA libraries. In situ hybridization. Immunohistochemistry. Northern analyses. Gel shift assays.

James Krueger
Dept. of Physiology
University of Tennessee
894 Union Ave.
Memphis, TN 38163 USA

TEL: 1-901-528-5981
FAX: 1-901-528-7126

Research Descriptors

Cytokines	Infection	Neuroendocrines
Growth hormone releasing hormone	Interferon	Prolactin
	Interleukinetics	Sleep factors

Areas of Research

Studies are being undertaken of sleep factors. Neuroendocrines and sleep are being studied as are interleukin-1 and growth hormone releasing hormone.

Peretz Lavie
Technion I.T.T.
Sleep Lab, Fac. Med.
Sleep Lab Gutwirth Bldg.
Haifa 32000 ISRAEL

TEL: 972-4-226-695
FAX: 972-4-323-045

Research Descriptors

Actigraphy	Infants	PTSD
Apnea	Melatonin	Sleep propensity

Areas of Research

Sleep propensity function studied by the 7/13 method. Individual differences in sleep propensity. Effects of melatonin and light on sleep propensity. Blood pressure and sleep apnea syndrome. Sleep in post-traumatic stress disorder (PTSD) patients. Actigraphic monitoring.

Shiyi Liu
Shanghai Inst. of Physiology
Chinese Academy of Sciences
320 Yue-Yang Road
Shanghai 200031 CHINA

TEL: 86-21-247-8483
FAX: 86-21-433-2445

Research Descriptors

Circadian and ultradian rhythms	Circasemidian sleep	Sleep factors
	Suprachiasmatic nucleus	Tupaiaidae

Areas of Research

Mechanisms of endogenous sleep substances. Mechanisms of sleep in relation to biological clocks (e.g., circadian, ultradian, circasemidian). Sleep factors, morphology of the suprachiasmatic nucleus.

Elio Lugaresi
Clinica Neurologica
University of Bologna
Via Ugo Foscolo N. 7
Bologna 40135 ITALY

TEL: 39-51-644-2111
FAX: 39-51-644-2165

Research Descriptors

Apnea	Idiopathic recurring coma	Nocturnal paroxysmal
Autonomic function	Insomnia	dystonia

Areas of Research

Sleep apnea syndrome. Various sleep-related neurological disorders are being examined such as sleep and autonomic function, nocturnal paroxysmal dystonia, fatal familial insomnia and idiopathic recurring coma. Other contact: Dr. Pasquale Montagna.

Ralph Lydic
Dept. of Anesthesia
College of Medicine
Penn State University
Hershey, PA 17033 USA

TEL: 1-717-531-8433
FAX: 1-717-531-6221

Research Descriptors

Anesthesia	Microdialysis-HPLC	Respiration
Extracellular recording	Microinjection	

Areas of Research

Cholinergic mechanisms contributing to state-dependent respiratory depression. Microdialysis-HPLC, extracellular recordings, microinjection, respiratory control, breathing during sleep, mechanisms of anesthetic action.

Mark Mahowald
Sleep Disorders Center
Hennepin County Med. Ctr.
701 Park Avenue South
Minneapolis, MN 55415 USA

TEL: 1-612-347-6288
FAX: 1-612-347-2959

Research Descriptors

Apnea	Parasomnias	Sleep disorders
Nocturnal seizures	REM Behavior Disorder	

Areas of Research

REM Behavior Disorder and other sleep disorders such as parasomnias, nocturnal seizures, night terrors, apnea, etc. Various other sleep disorders are being investigated.

Robert McCarley
Dept. of Psychiatry 116A
Veterans Administration
Medical Center
940 Belmont St.
Brockton, MA 02401 USA

TEL: 1-508-583-4500 ext. 367
FAX: 1-508-580-0059

Research Descriptors

Immediate early genes	Neuropharmacology	Slice recording
In vitro studies	Patchclamp recording	

Areas of Research

Intracellular and concomitant extracellular recordings in vivo and in vitro. Microinjection of pharmacologic agents. Effects on REM sleep in cats. Immediate early genes and REM sleep.

Jaime Monti
Facultad de Medicina
Hospital de Clinicas - Piso 1
Montevideo URUGUAY

TEL: 598-2-473-083 or 472-707
FAX: 598-2-471-783

Research Descriptors

5, 7 dihydroxytryptamine	-methylhistamine	Thioperamine-H3-receptor
5-HT _{1A} receptor agonists	Dorsal raphe	
8-OH-DPAT-partial agonists		

Areas of Research

Role of serotonin receptor subtypes in the control of sleep and wakefulness. Role of histamine in the control of the waking state. Pharmacological and neurochemical approaches. Use of selective agonists and antagonists.

Adrian Morrison
Department of Animal Biology
School of Veterinary Medicine
University of Pennsylvania
Philadelphia, PA 19104 USA

TEL: 1-215-898-8891
FAX: 1-215-573-2004

Research Descriptors

Atonia	PGO waves	REM without atonia
Orienting	Pharmacology	

Areas of Research

Local infusion of receptor agonists and antagonists to study the control of spontaneous and elicited PGO waves. Studies of REM without atonia to determine systems preventing arousal.

Lev Mukhametov
Severtsov Inst. Evol. Morphol.
and Ecology of Animals
USSR Academy of Sciences
Leninsky prospekt, 33
Moscow 117071 USSR

TEL: 7-95-415-11
FAX: 7-95-129-1354

Research Descriptors

Aquatic mammals	Pinnipeds	Unihemispheric SWS
Dolphins	Sleep peptides	

Areas of Research

Comparative physiology of sleep. Humoral regulation of sleep. Sleep in aquatic mammals (dolphins, pinnipeds). Other contact: V.M. Kovalzon.

Alain Muzet
LPPE
CNRS-INRS
21 Rue Becquerel
Strasbourg Cedex F-67087
FRANCE

TEL: 33-88-28-67-83
FAX: 33-88-28-62-45

Research Descriptors

Biological rhythms	Humans	Sleep inertia
Environment	Physiology	Vigilance
Hormones	Sleep deprivation	

Areas of Research

Physiology of human sleep. The effects of environmental factors (noise, ambient temperature) on sleep are being studied. Sleep and biological rhythms are being investigated in relation to sleep deprivation and endocrinology.

Teruo Okuma
Division of Psychophysiology
National Institute of Mental
Health/NCNP
1-7-3 Kohnodai, Ichikawa City
Chiba 272 JAPAN

TEL: 81-473-72-0141
FAX: 81-473-71-2900

Research Descriptors

Aging	Circadian rhythms	Parasomnias
Alcoholism and drug abuse	Instrumentation and methodology	Physiology
Biological rhythms		Sleep deprivation

Areas of Research

Long-term monitoring study of Delayed Sleep Phase Syndrome. Seasonality in Japan. Circadian rhythm disorders in the elderly and EEG waveform analysis. REM Behavior Disorders. Effects of benzodiazepines on cognitive process using ERP.

Allan Pack
Center for Sleep and
Respiratory Neurobiology
991 Maloney Building
Hosp. of the Univ. of Penn.
3600 Spruce St.
Philadelphia, PA 19104-4283
USA

TEL: 1-215-662-3302
FAX: 1-215-662-7749

Research Descriptors

Apnea	Respiration	Upper airway
REM sleep	Sleep factors	

Areas of Research

Pathogenesis of obstructive sleep apnea. Investigation of neural mechanisms that lead to apnea in different stages of sleep. Studies of mechanisms that control different components of REM sleep. Neural basis for excessive sleepiness in apnea.

Pier Luigi Parmeggiani
Istituto Fisiologia
University of Bologna
Piazza Porta San Donato 2
Bologna 40127 ITALY

TEL: 39-51-244-499
FAX: 39-51-251-731

Research Descriptors

Autonomic function	Hypothalamic temperature	Thermosensitive neurons
Brown adipose tissue	Regional circulation	
Hypothalamic cAMP	Sleep deprivation	

Areas of Research

Basic physiology of sleep. Of particular interest is the relationship between thermoregulation and sleep. Circulation during sleep is also being studied. Neurochemistry.

Fernando Reinoso-Suárez
Dept. Morfología
Facultad de Medicina
Universidad Autónoma
de Madrid
Arzobispo Morcillo s/n
Madrid 28029 SPAIN

TEL: 34-1-397-5322
FAX: 34-1-315-0075

Research Descriptors

Brainstem	Neuroanatomy	Unit activity
Immunohistochemistry	Neurotransmitters	
Microinjection	Peptides (opiates)	

Areas of Research

Basic research in animals. Brainstem mechanisms in sleep and waking. Microstimulation with neurotransmitters and neuromodulators. Neuroanatomy and immunohistochemistry at light and electron microscopic levels.

Thomas Roth
Sleep Disorders Center
Henry Ford Hospital
2921 W. Grand Blvd.
Detroit, MI 48202 USA

TEL: 1-313-972-1804
FAX: 1-313-874-7158

Research Descriptors

Daytime sleepiness	Insomnia	Psychopharmacology
Ethanol	Narcolepsy	Sleep deprivation

Areas of Research

Homeostatic processes in sleep drive. Normal and pathological determinations of daytime receptors. Psychopharmacology and sleep and daytime sleepiness.

Jerome Siegel
Neurobiology Res. 151 A3
Veterans Administration
Medical Center
Sepulveda, CA 91343 USA

TEL: 1-818-895-9433
FAX: 1-818-895-9575

Research Descriptors

Atonia	Immunohistochemistry	Unit activity
Brainstem	PGO spikes	
C-fos	REM sleep	

Areas of Research

Neuronal activity in the narcoleptic dog. Control of muscle tone in the decerebrate cat using unit recording and microinjection techniques. Organization of circuitry responsible for muscle atonia and PGO spikes using immunohistochemical techniques.

Mircea Steriade
Lab. de Neurophysiologie
Dept. de Physiologie
Faculté de Médecine
Université Laval
Quebec G1K 7P4 CANADA

TEL: 1-418-656-5547
FAX: 1-418-656-7898

Research Descriptors

Brainstem cholinergic nuclei	EEG	Spindle rhythm
Delta rhythm	Neocortex	Thalamus
	Slow (<1 Hz) oscillations	

Areas of Research

Electrophysiology of neocortical and thalamic cells implicated in sleep oscillations and neuromodulatory systems (intracellular recordings in acute experiments).

Colin Sullivan
Dept. of Medicine
University of Sydney
Sydney, NSW 2006
AUSTRALIA

TEL: 61-2-516-8024
FAX: 61-2-550-3851

Research Descriptors

Apnea	Hormones	Upper airway
Chemosensitivity	Hypoxia	
CPAP	Neurotransmitters	

Areas of Research

Upper airway function in sleeping dogs. Intermittent hypoxia in the rat. Pathophysiology and treatment of sleep apnea. Neurochemistry of sleep apnea. Chemosensitivity, CPAP, neurotransmitters, hormones.



Reidun Ursin
Dept. of Physiology
University of Bergen
Arstadveien 19
N-5009 Bergen NORWAY

TEL: 47-5-20-64-07
FAX: 47-5-20-64-10

Research Descriptors

Automatic sleep scoring	EEG power spectrum	Rats
Behavioral pharmacology	Neuropharmacology	Serotonin

Areas of Research

Basic research in animals, specifically serotonergic mechanisms in sleep and waking. Effects of serotonin uptake inhibitors in conjunction with antagonists to specific serotonin receptor subtypes.

Ricardo Velluti
Dept. of Physiology
School of Medicine
Universidad de Republica
General Flores 2125
Montevideo URUGUAY

TEL: 598-2-944-677
FAX: 598-2-943-416

Research Descriptors

Auditory deprivation	Lesions	Unit activity
Guinea pigs	Sensory processing	

Areas of Research

Sleep physiology and auditory sensory input. Unit recording of identified auditory neurons during sleep and waking behavior. Study of deprived, lesioned guinea pigs (deaf) in relation to sleep architecture. Alternate FAX: 598-2-948-784.

Laboratories that are interested in becoming a member of the WFSRS Consortium of Sleep Training Laboratories should contact—

Pier Luigi Parmeggiani, M.D.
WFSRS Consortium of Sleep Training Laboratories
Istituto Fisiologia
University of Bologna
Piazza Porta San Donato 2
Bologna 40127 ITALY
Tel: 39-51-244-499
Fax: 39-51-251-731

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 — binding, Baghdoyan (1)

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 — Behavior Disorder, Mahowald (6);
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Deadlines for the Receipt of Applications—

February 1st

and

September 1st



Consortium of Sleep Training Laboratories

A P P L I C A T I O N

¶ Family Name: _____ First Name: _____

Citizenship/Nationality: _____ Date of Birth: _____

Home Address: _____

_____ Country: _____

Tel. No.: _____ FAX No. (if available): _____

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• Originating Laboratory and/or Director: _____

Address: _____

Tel. No.: _____ FAX No. (if available): _____

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, Consortium Laboratory and/or Director: _____

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Prospective Supervisor: _____

Dates of Fellowship: From: _____ To: _____

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„ Have you applied for a travel fellowship from another organization? YES NO

IF YES: Name of Organization: _____

Amount of Award: _____ Dates of Award: _____

Status of Award: Received Rejected Other (Please explain _____)

Fields of training and research experience.

.....
Brief curriculum vita including University education, employment, positions held, etc. (Please use continuation sheets, if necessary)

.....
. List below your three most important publications. (Please enclose 2 reprints of each publication)

a.

b.

c.

.....
o Research program. Present an overview of the proposed research including the specific aims and a description of the methods that will be employed. (Please use a continuation sheet—no more than one single-spaced page)

.....
i Relevancy of the proposed training to the future career of the candidate. (Please use a continuation page—no more than one single-spaced page, if necessary)

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Amount requested for travel to the Consortium Laboratory \$_____US

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Signature of Applicant

Date

Signature of the Director of the Laboratory of Origin

Deadlines for the Receipt of Applications
February 1st and September 1st

Return your Application to:

Pier Luigi Parmeggiani, M.D.
WFSRS Consortium of Sleep Training Laboratories
Istituto Fisiologia
University of Bologna
Piazza Porta San Donato 2
Bologna 40127 ITALY
Tel: 39-51-244-499 Fax: 39-51-251-731

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