EDITORIAL by Prof. Giorgio Racagni

The Department of Pharmacological and Biomolecular Sciences - DiSFeB – was founded on 27th April 2012 merging together three different Departments, however, all with common interests in the field of pharmacy. The DiSFeB brings together research teams with similar interests, allowing them to share scientific/technological platforms, guaranteeing its members a scientific environment of excellence where common and innovative projects may be developed. The multidisciplinary nature of the DiSFeB reflects the reality of current scientific approach and allows the creation of synergies aimed at the advancement and development of the respective areas of scientific research.

Our strengths are excellence in multidisciplinary research and training of young scientists! Our numbers speak for themselves: 25 research laboratories, 46 professors, 24 assistant professors, 53 postdoc-fellows, 38 PhD students, 29 laboratory technicians, 29 laboratory technicians, 29 laboratory technicians, and, every year, hundreds of students fulfilling their experimental thesis period working in our laboratories.

With more than 120 scientific publications per year in peer-reviewed journals and more than 60 on-going projects funded by national and international public and private institutions, the DiSFeB is number one in the evaluation of research done by Università degli Studi di Milano - La Statale and on top in the evaluation of research done by Agenzia Nazionale della Valutazione della Ricerca (ANVUR).

This newsletter aims at not only increasing the visibility of our research activities, but also at implementing new collaborations and at attracting young talents. If you, like us, believe in high-level research, follow us on our website www.disfeb.unimi.it and on facebook, to keep abreast of all our activities and our successes, or write us to disfeb.ricerca@unimi.it to receive information regarding open positions.

IN-HOUSE SCIENCE

Ovariectomy shortens the life span of female mice

“The capability to control the metabolic derangement that women experience during menopause should be included among the most important expected therapeutic outcomes, when devising new hormone replacement therapies”

Benedusi et al. Oncotarget. 2015................................................. p.2

Dysfunctional SEMA3E signaling underlies gonadotropin-releasing hormone neuron deficiency in Kallmann syndrome

“This study opens new important perspectives for a premature diagnosis of many genetic forms of infertility”

Cariboni et al. J Clin Invest. 2015................................................. p.2

Lack of Sterol Regulatory Element Binding Factor-1c Imposes Glial Fatty Acid Utilization Leading to Peripheral Neuropathy

“We proved that there is a strong association between an impaired fatty acid synthesis and peripheral nerve degeneration”

Cermenati et al. Cell Metab. 2015................................................. p.3

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While you’re probably aware that food restriction has been associated with a longer life span, it’s more likely that you’ve never heard that removal of germ cells is also associated with a longer life span. This evidence has been found in species as diverse as worms, flies and other insects, fishes and mammals. As grim as this may sound, it is in stark contrast with what is happening in the human system, where ovarioctomy or pathological conditions associated with a loss of ovarian function lead to a derangement of both energy metabolism and immune function. Moreover, menopause is associated with metabolic dysfunctions. Benedusi and colleagues sought to unravel the mechanisms accounting for this evidence by gonads removal in mice. First, they confirmed that gonad removal at 5 months of age increased the risk of death in females but not in males, the latter displaying even an inverse correlation. This was associated to an increased basal expression of genes related to inflammatory processes in metabolic organs (liver and visceral white adipose tissue - vWAT) and in the aorta, including TNF, MCP-1, IL-6 and II1β. This increase was small but steady, requiring months to become significant.

To further address the impact of the duration of steroid hormone deprivation, the experiments were repeated but surgery was performed much earlier, on 1-month-old female mice, just after the first estrous cycle or at 4 months of age. Animals were euthanized at 5 months of age, thus allowing 4 (long term) or just 1 (short term) month after ovarioctomy. A longer period spent in the absence of ovarian hormones translated into higher expression of inflammatory genes, compatible with the slow accumulation of inflammatory products triggered by estrogen shortage. Interestingly, in the vWAT even the short-term group of animals readily displayed an increase in activated macrophages.

Further, they demonstrated that ovarioctomy produces other profound changes in the white adipose tissue: the lack of estrogen results in larger, swollen adipocytes, a finding consistent with the sudden weight gain experienced by gonadectomized females, in contrast with the steady growth of sham operated mice.

The study shows that lack of ovarian activity has a negative impact on the life span of female mice, leading to an increase of inflammatory parameters and results in an increased adipocyte size.

The authors underlined belong to DiSFeB

Dysfunctional SEMA3E signaling underlies gonadotropin-releasing hormone neuron deficiency in Kallmann syndrome

The hypothalamic neurons that secrete the neurohormone gonadotropin-releasing hormone (GnRH) are fundamental for the correct function of the sexual system and their developmental alterations may lead to impaired puberty and infertility. At a clinical level, this condition is known as hypogonadotropic hypogonadism or, when accompanied by anosmia, as Kallmann Syndrome (KS). With a very clear and multidisciplinary approach, Cariboni and colleagues found that semaphorin3E (SEMA3E) is fundamental not only for the correct neuronal wiring of the developing brain but it is also crucial for the survival of GnRH neurons. In particular, through exome sequencing analysis, they found a missense mutation in the gene encoding for SEMA3E in two brothers affected by KS; subsequently, by using cell lines and genetically engineered animal models, they confirmed that this molecule, already known for its role in the development of blood vessels, may be important for human reproduction.

This work – funded by Telethon and BBSRC (a British non-profit agency) – took four years to be fully completed and involved researchers from different European institutions. The group of Prof. Cariboni at the DiSFeB, was mainly involved in the characterization of the cellular and animal models of developing GnRH neurons; the different units of the University College of London recruited the patients, performed the mutational modelling analysis and provided the knock-out animals; lastly, the researchers from the hospital of the University of Lausanne performed the exome sequencing.

The main authors of this research, Prof. Cariboni and Ruhrberg, stated: “This study opens new important perspectives for a premature diagnosis of many genetic forms of infertility”. Indeed, genetic screening, together with a suitable diagnosis and a prompt hormonal treatment at the beginning of puberty, may improve the conditions of young men affected by KS. In addition, it has to be noted that KS is an oligogenic pathology, meaning that it...
Peripheral neuropathies represent one of the most common type 1 and type 2 diabetes complications. These pathologies deeply compromise peripheral nerve function and arise with the loss of lower limb sensibility and a higher nociceptive threshold. Based on their etiology, peripheral neuropathies are divided into 2 different groups: the inherited, called Charcot-Marie-Tooth peripheral neuropathies, and the acquired peripheral neuropathies, caused by aging, physical injury, pharmacological treatment and metabolic disorders such as diabetes.

“Lipids are divided in two different classes: cholesterol and fatty acids.” - the authors state - “The role of cholesterol in the development of peripheral neuropathies has been deeply characterized. On the other hand, the role of fatty acid in such process is obscure. For this reason, for the first time, we proved that there is a strong association between an impaired fatty acid synthesis and peripheral nerve degeneration”. The study was conducted using a mouse model of blunted fatty acid synthesis. Specifically, Cermenati and colleagues, proved that 10-month-old mice lacking the lipogenic transcription factor Srebf-1c have lower thermal and mechanical nociceptive thresholds. Due to altered myelin periodicity, Srebf1c KO mice have hypermyelinated small-caliber fibers that appear expanded and yield myelin instability. Integrating transcriptomic and metabolomic analyses, the authors found out that lack of Srebf-1c boosts lipid oxidation and utilization by peripheral nerve that in physiological condition uses glucose as energetic fuel. The metabolomic profile demonstrated that Srebf-1c KO mice exhibit higher levels of two lipid species: phosphatidylcholine (PC)-C16:0/C18:0 and PC-C18:0/18:1. Previous works indicated that these molecules can directly bind the transcription factor Pparα, a critical regulator of β-oxidation and mitochondrial function. The authors showed that the accumulation of these two molecules bridges the lack of Srebf-1c, energy depletion and increased fatty acid catabolism, leading to peripheral neuropathy in Srebf-1c KO mice. Finally, treating Srebf-1c KO mice with the specific Pparα antagonist GW6471 rescued the phenotype of these mice, blunting the symptoms of peripheral neuropathy.

This research collects the efforts of different international groups and sheds light on the role of endogenous synthesis of fatty acid in the onset of peripheral neuropathies. In addition, it could represent a turning point for the explanation of peripheral neuropathy affecting patients treated with fibrates, an elite treatment for hyperyglycemia and specific Pparα agonists. Next step will be to figure out how the association between metabolism, synthesis and utilization of fatty acid and peripheral neuropathy can be used to develop new specific pharmacological therapies. Treatments targeted to restore a balanced synthesis/utilization of fatty acid in peripheral nerve represent a promising approach for peripheral neuropathy therapy.

The combination of different approaches, namely exome sequencing on Kallmann Syndrome (KS) patients, bioinformatic analysis, tissue culture models and the studies on genetically modified mice, enables the identification of genes involved in GnRH neuron development and disease. The discovery of new genes -as SEMASE- involved in this oligogenic disease, may allow an early diagnosis and a well-timed treatment for young men affected by KS.

Lack of Sterol Regulatory Element Binding Factor-1c Imposes Glial Fatty Acid Utilization Leading to Peripheral Neuropathy
Jennifer Stanic vs Cristina Sensi

Post-doctoral fellow in the Pharmacology of neurodegeneration laboratory at DiSFeB. PhD in Pharmacological Sciences, Università degli Studi di Milano - La Statale, Master in Cellular Biology, Physiology and Pathology for Neurosciences, Paris V University. She is interested in science in general, in particular neurosciences and anthropology/sociology but only for mind control purposes. Pop Culture Nerd. She hates spiders… but not Spiderman.

Cristina Sensi

Graduated in Bioinformatics and PhD in Experimental and Clinical Nutrition, she is currently Post Doc at the European Molecular Biology Laboratory, in Grenoble. She has always dealt with structural biochemistry and in silico screening of chemical compounds. She has published over 20 articles in international journals and she holds a patent for new compounds with properties in neurodegenerative diseases. Photographer, in 2014, she won the competition “Obiettivo Italia” and, in 2015, the international contest “CERN Photowalk”. In 2015, she exhibited at “Biennale della fotografia italiana”.

Why did you move to/leave Italy?

I have always wanted to go abroad. I was looking for potential Neuroscience PhD programs in Europe when I came across a Marie Curie Actions training program called SyMBaD. It involved 6 European universities (23 labs). I wasn't interested in the location of the projects since they all involved outstanding universities, but when I found out that the most interesting project was in the Lab of Prof Monica Di Luca at DiSFeB, I was delighted because Milan is better than Goettingen for a girl from Paris.

I left Italy in search of a new work experience in an international and scientifically challenging environment, also considering the limited job prospects in Italy. Moreover, after the PhD and two years as a Post Doc, it was time to look for a role with greater independence. Last but not least, the desire for a better economic condition played a significant role.

What have you gained from your experience at the DiSFeB?

The diversity of labs comprised within the DiSFeB has greatly helped widen my knowledge and technical skills as well as sharpened my analytical and critical thinking. The DiSFeB has taught me that basically nothing is impossible, one way or another it can be done. The DiSFeB has been a very important place of professional and personal growth where I have met great colleagues who have taught me a lot and eventually have become dear friends.

The DiSFeB is the place where I honed my knowledge and I owe the DiSFeB almost all my working and communication skills, I had the chance to deepen various aspects of research, merging my biocomputational skills with the wet lab techniques. I was involved in many projects and I had the opportunity to meet experts from different fields and to acquire new transferable skills. In addition, the years at the DiSFeB have made me a more knowledgeable, mature and complete person.

PROS AND CONS of working in France or Italy?

France. Pros: organization (not too much, not too little), state-of-the-art research tools-platforms-engineers, social security. Cons: competition (few research positions), too quiet, little collaboration between colleagues.

Italy. Pros: “if there is a will there is a way” attitude, co-operative working environment, flexible working hours. Cons: complicated bureaucracy, not so accessible for foreigners. Sometimes yes means no and vice versa, creating confusion.

France. Pros: international and scientifically challenging, an enviable salary, and a “Michelin-starred” canteen. Cons: very competitive, more serious colleagues. Rainy weather.

Italy. Pros: attention to professional and personal growth, high-level science, and a friendly atmosphere. Cons: impossibility to plan a long-term professional and personal life, high-profile scientists working with inadequate resources (poor facilities and tools).

What are the strengths and weaknesses of the French and the Italians?

French: systematic and methodological. Problem solvers, but if something works don't change it even if the change could improve the final result.

Italians: professionally motivated and passionate but resigned to accepting a complicated, bureaucratic system and a precarious situation.

French: Great organizational skills - too much bureaucracy (worse than in Italy!).

Italians: the ability to work overtime. Resignation to the situation.
After the success of the previous NEXT STEP meetings - LA GIOVANE RICERCA AVANZA - on July 2nd, the event returned to the DiSFeB for its 6th appointment. Every year, NEXT STEP is the day of the young scientists of the DiSFeB. The meeting is indeed totally organised by PhD students and PostDocs. Students, just graduated or enrolled in a PhD program, have the chance to share the results of their scientific activity and to network with other researchers.

The DiSFeB Director, Prof. Giorgio Racagni, held the opening “ceremony”, highlighting that the PhD training is a real professional and personal experience that enables students to acquire a high level of education, introducing them to a range of career opportunities in both academic and non-academic areas.

Through six symposia, covering different research topics in the field of neuroscience, immunology, cardiology, metabolism and nutraceutica, talented young researchers have demonstrated their ability to conduct research of high scientific quality, reflecting their enthusiasm, determination, hard work and dedicated practice. The topics were as diverse as the methodologies used to study them, but all the presentations shared the common goal of favouring positive scientific exchanges. To support the high-quality training, the best oral presentations received an award (see Box).

The meeting also included a round table session to discuss and debate on job opportunities after the academic training period. The group of invited scientists were: Graziella Messina (Associate Professor at Università degli Studi di Milano - La Statale), Camilla Bellone (Assistant professor SNSF - Swiss National Science Foundation - at University of Lausanne), Maria Moscutto (Grant officer at Università degli Studi di Milano - La Statale), Ilaria Libani (Patent officer at Università degli Studi di Milano - La Statale), Federica Polli (Product Manager at Otsuka Pharmaceutical), Samuele Scurati (Application Scientist at DASP), Cinzia Ballabio (Technical Service at SISTE), Germana Galli (Medical Specialist at Parexel International). They have in common a PhD training but now they are employed in different scientific fields. After sharing their experiences, they gave inspirational messages to young investigators, inviting them to consider doctoral studies as a way to reach their full potential and a stepping stone to future careers, not only necessarily in academic research labs, but also in other non-academic realities.

Accordingly, they boosted students to be dynamic and enterprising workers, willing to be involved in international experiences, underlying that research activity has multiple “shades”, as demonstrated by their work experiences.

Best oral presentation awards

**Cardiovascular**
- Fabio Lucca
- Giulia Ganzetti

**Immunology**
- Giulia Dell'Omo

**Metabolism**
- Federica Lolli

**Neurosciences**
- Chiara Malpighi
- Veronica Begni

**Nutraceutical**
- Monica Marzagalli

Germana Galli's work experience

“The experience and background gained working in the laboratory of Pharmacognosy, directed by Prof. Bosisio, have been very crucial for my career in Clinical Research, first as a Clinical Research Associate and subsequently as a Medical Specialist. My experience in the lab allowed me to gain not only a solid scientific background, but also flexibility, the ability to prioritize tasks and to manage projects and activities working in team.

My choice to stay in a laboratory after the graduation and to obtain a PhD was first and mainly an emotional decision, made to follow my passion for science and research. Now, after a seven-year-experience in Contract Research Organizations and in the Headquarters of a big pharmaceutical company, I strongly believe it was a necessary step of my path and I would recommend young students and researchers to spend time at the lab bench and enjoy all the aspects of the research. This experience will be very useful for their future if they decide to continue the career in the basic research, but also in case they choose to leave the academic world and enter into the pharmaceutical industry.”
A series of conferences were held from June to October 2015 at the DiSFeB, Università degli Studi di Milano - La Statale, in connection with EXPO on the main theme “Technological Evolution in Food Production – impact on quality and safety – effects on health, importance of proper information”. Each of these six open to the public events were organized in collaboration with the Nutrition Foundation of Italy (NFI) and focused on a food category, with particular attention to quality and safety for the consumer.

Meat and Fish (17th June 2015): Preservation methods to safeguard nutrients and safety. The nutritional value of meat and fish was illustrated by Prof. Ernestina Casiraghi (Università degli Studi di Milano - La Statale) together with Dr. Carlo Agostoni (IRCCS Policlinico) and Prof. Claudio Galli (DiSFeB).

Moreover, they described how new metal-based systems of packaging, characterized by stability, impermeability to air and light, low prices and recyclability, have been developed in recent years by several specialized companies (e.g. Rio Mare, Milano) in order to better preserve meat and fish quality.

Bread and Pasta (1st July 2015): The speaker, Prof. Furio Brighenti (Università degli Studi di Parma) highlighted the lower Glycemic Index of pasta compared to bread and rice and explained the new technological strategies aimed at modulating this index as well as reducing sodium content in industrial products. According to Dr. Pietro de Albertis (Barilla Company), adding extracts from aleuronic layer of grains, which are particularly rich in thiamine, niacin, phosphorus, magnesium and iron, could be the next step towards a quality improvement to pasta.

Botanicals and Dietary Supplements (15th July 2015): “Natural is not a synonym of safe” is the leitmotiv of the talk by Dr. Andrea Poli (NFI) and Prof. Patrizia Restani (DiSFeB). A technological approach is fundamental in order to guarantee quality and safety of botanicals, in terms of excellence of raw material and absence of natural (e.g. mycotoxins) or industrial (e.g. polychlorobiphenyl) contaminants. In parallel, it is fundamental to provide information about side effects and potential interactions of botanicals and supplements with other drugs. A very common example: most people don’t know that the simultaneous administration of Ginkgo biloba L. extracts (useful to memory improvement and against psychophysical stress) and other drugs of common use, such as Aspirin, increases the risk of haemorrhage.

Breakfast and snack (16th September 2015): Dr. Andrea Ghiselli (CREA) illustrated the crucial role of breakfast as part of a balanced diet. A proper breakfast in terms of quality and quantity contributes to reduce food intake and glycemic response during the following meal, decreasing the risk of obesity and of the associated diseases. Moreover, appropriate mid-morning and afternoon snacks (e.g. fruit or yoghurt) maintain the sense of satiety and reduce the caloric intake at lunch and dinner.

Fruit and vegetables (30th September 2015): Prof. Vincenzo Fogliano (Wageningen University, The Netherlands), pointed out the widespread availability of fruit and vegetables also out of the natural season thanks to new technologies of production and conservation. Preservation techniques, such as freezing, guarantee the maintenance of the nutritional content of the fresh product, without the addition of preservatives. Moreover, he described two types of new packaging techniques, aimed to increase the shelf-life and contribute to maintain products quality.

Milk and yoghurt (14th October 2015): Prof. Luisa Pellegrino (Università degli Studi di Milano - La Statale) described the characteristics of milk constituents and the technological aspects of milk production. Recently, the research has focused on bioactive peptides that could have a positive role on different physiological systems (e.g. the immune system), but the in vivo bioavailability has to be verified. The most advanced technologies allow not only to increase milk shelf-life (e.g. microfiltration) and the stability of functional ingredients (e.g. antioxidants or probiotics) but also to obtain microparticulated serum proteins, which can be used to replace most of the milk lipid fraction.


Botanicals for nutrition and health - The Nagoya protocol

On 13th July 2015, on the occasion of EXPO, the DiSFeB organized the event “Botanicals for nutrition and health: from the Nagoya protocol to the international cooperation” with the aim to overview the use of Botanicals in different cultures and geographical areas (EU: Austria, Italy and Romania - Albania, China, India, Japan, South Africa). On 14th July 2015, in the framework of existing exchanges, the DiSFeB invited Prof. Hiroyuki Fukui and Dr. Licht Miyamoto from the University of Tokushima (Japan). During the seminar entitled “Awa-bancha, a special fermented tea produced in mountainous region in Tokushima, for the therapy of pollinosis”, Prof. Hiroyuki Fukui illustrated the possible use of awa-tea (a tea produced with a special fermentation by lactic acid bacteria) in reducing H1 receptors expression in rats.

During the seminar entitled “5AMPK as a therapeutic target for metabolic diseases – its role and regulatory mechanisms”, Dr. Licht Miyamoto explained the role of AMPK (5’AMP-activated protein kinase) in glucose and leptin regulation and how the activation of the enzyme could be used in metabolic syndrome and lipoatrophic diabetes.
The DiSFeB promotes several post-graduate courses for the academic year 2015/16, whose calls are published or are about to be published:

**MASTERS:**
- **Master di secondo livello in Farmacia e Farmacologia Oncologica** - Coordinator: Alberto Corsini
  For info, write to: alberto.corsini@unimi.it
- **Master di secondo livello in Farmacovigilanza** - Coordinator: Alberico Catapano
  For info, write to: segreteria@sefap.it
  Website: www.sefap.it, http://masterfv.ariel.ctu.unimi.it

**SPECIALIZED COURSES:**
- **Farmacia oncologica** – Coordinator: Alberto Corsini
  For info, write to: alberto.corsini@unimi.it
- **Farmacovigilanza** – Coordinator: Alberico Catapano
  For info, write to: segreteria@sefap.it, segreteria.sefap@unimi.it
  Website: http://www.sefap.it, http://ariel.unimi.it

**DiSFeB Grants & Awards**

**DiSFeB Grants… July-November 2015**

- **JPI Neurodegenerative Diseases**, joint action MIUR-CE: “Synapse-to-nucleus communication in Alzheimer disease (STAD)”. Principal investigator: Monica DiLuca.
- **Ministero degli Affari Esteri e della Cooperazione Internazionale, Direzione Generale per la Cooperazione allo Sviluppo (MAECI-DGCS)**: “Lotta alla malaria in Burkina Faso: formazione e ricerca in malariologia”. Principal investigator: Donatella Taramelli.
- **Ministero della Salute, Bando Ricerca Finalizzata 2013**:
  - “Cell-type and subunit specific alterations of NMDA receptors in striatum at early stages of Parkinson’s disease”. Principal investigator: Fabrizio Bianchini.
- **Bando MAE Italia-Israel**:
  - “Predicting statin-associated muscle symptoms for a personalized hypocholesterolemic therapy (MIOSTATIN)”. Principal investigator: Alberto Corsini.

**Media e salute: tecniche e strategie per una comunicazione efficace** – Coordinator: Alberto Corsini
For info, write to: centrostudifarmaci@unimi.it

**Nutrizione e benessere** – Coordinator: Paolo Magni
For info, write to: stefano.bernardinelli@unimi.it
Website: http://nb.ariel.ctu.unimi.it

**As of current academic year, a new Master Course in English, “Safety Assessment of Xenobiotics and Biotechnological Products”, is proposed by DiSFeB with the aim of providing specific knowledge in the analysis and assessment of risk according to international standards. The peculiarity of this Master Course, which is unique in Italy and rare to be found in Europe, is a strong focus on the application of the international rules through an integrated study of different areas such as legislation, chemistry, toxicology, pharmacology, biotechnology and analysis of the risk. For further information, refer to: http://www.farmacia.unimi.it/Corsi-DiLaurea/2016/E52of1/index_ITA.HTML.html or write to: saxbi@unimi.it**

**..and awards July-November 2015**

- **Monica Marzagalli** - selected to attend the summer School “Nuclear receptor signalling in physiology and disease (FEBS Advanced lecture course)” organized by Karolinska Institutet, Spetses, 23rd-28th August 2015.
- **Chiara Macchi** - selected to attend the Summer School in Prague organized by the International Atherosclerosis Research School, 23rd-29th August 2015.
- **Stefania Moretti** - selected to attend the “EMBL Advanced Course: Fluorescence Imaging Techniques”, Heidelberg, 28th June – 6th July 2015.
- **Andrea Carlo Rossetti** awarded the best poster award at the 37th Congress of Società Italiana di Farmacologia, Naples, 27th-30th October 2015.
- **Matteo Audano, Andrea Baragetti, Manuela Casula, Alessandra Ferrari** awarded the young investigator award at the Congress of SISA Lombardia, XIV Giornata di Studio - Ricerca clinica e di base nell’area cardiovascolare – “Il soggetto ad alto rischio cardiovascolare”, Milan, 16th-17th October 2015.
- **Marco Busnelli** awarded the best oral presentation award at the 29th Congress of Società Italiana per lo Studio dell’Aterosclero- si, Bologna, 22nd-24th November 2015.
- **Elena Kummer** - awarded the LUSH award 2015, a recognition for young researchers working in the field of alternative testing methods.
- **Giulia Magni and Laura Musazzi** - awarded Farmlandura-Società Italiana di Farmacologia (SIF) award 2015, a recognition for young researchers belonging to the “Accademia e altri Enti di Ricerca e dell’industria”.
- **Patrizia Amadio, Alessia Luoni, Stefano Musardo** - awarded the SIF Awards, consisting of a fellowship to be used in Italy or abroad.
DiSFeB Seminars

28th January 2016, 12.30 a.m., room B,
Daniela Mauceri, University of Heidelberg,
"Molecular and transcriptional control of neuronal structure"

23rd March 2016,
Lavinia Casati, Bone Metabolic Unit – Lab. Dr Valeria Sibilia
- Department of Medical Biotechnology and Translational Medicine,
"Evidence for a role of new antioxidant compounds in the prevention of age-related osteoblast dysfunction"

28th April 2016,
Silvia Carnevali, Laboratory Of Pharmacology of Eicosanoids,
DiSFeB,
"The active states of Thromboxane Prostanoid Receptor: the role of the highly conserved ERY motif"

25th February 2016,
Alessandra Ferrari, Laboratory G. Galli, DiSFeB,
"Reprogramming metabolism and white fat browning through HDAC3 ablation in adipose tissue"

January 2016,
Michela Guglielmotto,
"Amyloid-β accumulation: the role of Ubiquitin C-terminal hydrolase L1 (Uch-L1)"

February 2016,
Silvia De Marchis,
"COUP-TFI functions in Adult Neurogenesis"

March 2016,
Stefano Musardo, Laboratory of Pharmacology of Neurodegeneration, DiSFeB,
"Molecular aspects of Alzheimer’s Disease pathogenesis: from local spine trafficking to long distance spine to nucleus signalling"

April 2016 (date tbd),
Multimedica, Via Milanese 300, Sesto San Giovanni MI,
Joint meeting SISA Lombardia SISA Piemonte, SISA Liguria

3th July 2016,
the 7th annual "NEXT STEP MEETING" – La giovane ricerca avanza – The young researchers are moving forward

Fondazione Carlo Erba Via Giuseppe Vegni, 10
International symposium organized by the Centre for the Study of Atherosclerosis and Centre of Epidemiology and Preventive Pharmacology, the DiSFeB and with the support of the International Foundation Menarini,
"Plasma Lipid, Lipoproteins and Cardiovascular Diseases: from Genes to Clinical Intervention"

What’s up at DiSFeB

WINNER OF PHOTO CONTEST
Dr. Giuseppe Pani
Bone Marrow Human Mesenchymal Stem Cells differentiated into osteoblasts for 28 days in simulated microgravity. Triple immunofluorescence staining of type 1 collagen (green), actin filaments (red) and nuclei (blue).

Image was acquired with Zeiss Axiovert 200 and 40x objective.
Author Dr. Giuseppe Pani, Laboratory of Membrane Biochemistry and Applied Nutrition, DiSFeB.

Photo Contest