



Fondazione Italiana Fegato

ONLUS

Yearly Report FIF 2020

YEARLY REPORT 2020

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1. MEMBERS AND SUPPORTERS OF THE FOUNDATION

Members Promotors :

The Autonomous Region of Friuli Venezia Giulia
The Integrated University Healthcare Agency of Trieste
The University of Trieste
Clinica Medica Sur (Mexico City)
The Prodigys Group
Bilimetrix srl

Supporting Members:

The Consortium for the Scientific and Technological Research Area of Trieste (AREA Science Park)
The IRCSS Pascale of Naples
The Integrated University Hospital of Verona
Fondazione Genetica per la Vita (Genetics Foundation for Life)
Biovalley Investments

Adherent members, as well as numerous individuals:

The Aviano Oncological Reference Center (CRO)
The University of Udine

Supporters:

CR Trieste FOUNDATION (€ 50,000 contribution for Pro.Fe.Gra project)

2. MANAGEMENT BODIES

The bodies of the Foundation are:

The Steering Board
The Management Board
The Control Body
The Scientific Committee
The President of the Foundation



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In accordance with the statutory purposes, the Steering Committee determines the objectives and programs of the FIF and verifies the overall results of the Foundation's management.

One representative of each promoter member participates in the Steering Committee, with the exception of the FVG Region which by statute has the right to appoint two. The Management Board provides for the administration and management of the Foundation within the framework of the plans, projects and budget lines approved by the Steering Board.

The Control Body oversees compliance with the law and the bylaws and observance of the principles of proper administration, as well as the organizational, administrative and accounting structure and its functioning. It also carries out the statutory audit of the Foundation's accounts.

The Scientific Committee, chaired by prof. Francisco E. Baralle, organizes and monitors the development of the scientific and cultural activity of the Foundation and meets once a year. Composition of Bodies in the Transparent Administration section: <https://www.fegato.it>

3. STAFF

President-Legal Representative

Dr. Decio Ripandelli

Scientific director

Prof. Claudio Tiribelli

Permanent Scientific and Clinical Staff

Cristina Bellarosa, Basic Deputy Director and Senior scientist

Silvia Gazzin, Senior scientist

Natalia Rosso, Senior scientist

University of Trieste staff

Saveria Lory Crocè, Associate Professor University of Trieste and Director Clinic Liver Diseases

Silvia Palmisano, Associate Professor, University of Trieste Department of Medical, Surgical and Health Sciences

Permanent Technical Administrative Staff

Sabrina Corsucci, Head of Administration, transparency and grants

Sandra Leal, Laboratory Technician

Post Doc staff

Devis Pascut



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Pablo Giraudi (research fellow Veronesi Foundation)
Caecilia Hapsari Sukowati (research fellow Veronesi Foundation)

Assistant

Lucia Napoli

PhD students in Molecular Biomedicine, University of Trieste

Yogi Muhammad Pratama, (32nd cycle) extra extension
Annalisa Bianco, 3rd year (33rd cycle)
Sri Jayanti, 2nd year (34th cycle)
Kay Loraine Cabral, 1st year (35th cycle)
Noel Salvoza, 1st year (35th cycle)

Medicine Graduates - 4th year - Enrollment 16-17:

1. Dr. Michele Campigotto
2. Dr. Anna Colombo
3. Dr Alessia Visintin

Medicine Graduates - 3rd year - Enrollment 17-18:

1. Alessandro Aversano
2. Dr. Martina Budel
3. Luca Navarria

Medicine Graduates - 2nd year - Enrollment 18-19:

1. Carolina Aliai Micol Cavalli
2. Mauro Giuffrè
3. Anna Piccin
4. Riccardo Sigon

Medicine Graduates - 1st year - Enrollment 19-20:

1. Irma Valeria Albergati
2. Antonietta di Somma
3. Francesca Doctor
4. Gullotta Marco
5. Lisa Rebuzzi
6. Caterina Zoratti



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Trainees in thesis -

Serena Pinci

Chiara Andolfi

Luca Grisetti

Rachele Ortolan

Caterina Da Rodda

Chiara Ricci

Fellows - Visiting fellows

Gisela Weiz, National University of La Pampa (Argentina)

Ilenia Marino, MAT Consulting Scholarship

4. INSTITUTIONAL ACTIVITY

February 21, 2020 - Visit by the Prefect of Trieste Dr. Valerio Valenti

The Prefect of Trieste, Valerio Valenti, visited the FIF and was favorably impressed by the reality of the Foundation, defined as one of the multiple realities of excellence in the scientific and research fabric and projected in an international direction to promote scientific research and dissemination liver disease.

The Scientific Director Prof. Tiribelli and the President Del Prete recalled the history of the association with the Prefecture of Trieste, and the Prefect was asked to support the commitment to promote knowledge of the institute and facilitate the entry procedures of foreign researchers, who come to Trieste to conduct their studies in the Foundation's laboratories. In saying goodbye, Prefect Valenti ensured maximum collaboration and thanked the President Del Prete and the Director Tiribelli for the opportunity to meet.

April 2, 2020 - New appointments to the FIF

The new Steering Committee, elected by the Plenary Meeting of March 17, appointed at the meeting of March 30: Dr. Decio Ripandelli as President Prof. Giorgio Soardo as Vice President Prof. Claudio Tiribelli as President of the Scientific Committee.

Decio Ripandelli was Director of Administration and International Relations from 1996 to 2015 the International Center for Genetic Engineering and Biotechnology (ICGEB) and is currently professor of "accountability" of international NGOs at the Faculty of Economics of the International University of Rome (UNINT).

Giorgio Soardo is a Gastroenterologist Doctor, Medical Director and Professor of the



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School of Specialization in Internal Medicine at the University Hospital of Udine
Claudio Tiribelli, former Scientific Director of the Italian Liver Foundation, Professor in Clinical Biochemistry and Gastroenterology at the University of Trieste, Director of Medicine and Liver Pathologies Clinic at the University Hospital of Trieste . The new FIF representatives have taken note of the successes obtained and intend to reconfirm the clinical and scientific impact of the FIF in the regional, national and international reality and to further expand the educational and training activities for young people. In particular, to create opportunities for FIF to continue to attract talented young researchers from Italy and from numerous countries around the world.

May 20, 2020 - Thank you President

The Italian Liver Foundation wishes to express its heartfelt thanks for the commitment made in the 2017 - 2020 three-year assignment to the outgoing executive board, and in particular to the President Adriano Del Prete, a person who has put his high professionalism gained at the service of the FIF as top manager of important international companies - and did it with such a sincere participation, closeness, commitment and dedication. By assuming the position in FIF, President Del Prete accepted all the challenges in a completely new world and managed to successfully enter the complex administrative reality of the research world. On the human side, he managed to get in touch and be close to all the staff in different working and personal circumstances.

July 23, 2020 - Mayor Dipiazza meeting with the new FIF president

The Mayor Roberto Dipiazza received in the Town Hall the President of the Italian Liver Foundation (FIF), Decio Ripandelli accompanied by the Scientific Director Prof. Claudio Tiribelli.

During the interview, in view of the central role of Trieste as a 'City of Science', the notable international scientific programs carried out with great commitment by the FIF were reiterated, referring in particular, among other activities, to the commissioned hepatological network from the Philippines and relations with important cancer institutes in Southern Italy, in addition to the central participation in the medical part of ESOF2020, coordinated by the FIF itself.

September 25-27, 2020 - FIF in Trieste NEXT

The Italian Liver Foundation participated in the 2020 edition of Trieste Next, the Festival of scientific research with interactive activities and two conferences:

Interactive activity - THE LIVER CELL AT WORK

Friday 25 - Saturday 26 - Sunday 27 September

Stand Area - Piazza Unità d'Italia, Trieste, Italy



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A liver cell model illustrates the functions performed by this organ in normal conditions and also in processes of illness that stress or harm him. Activity open to all.

- Conferences with online booking:

Friday 25 September 2020 / 16:30 - 17:45 - Area Talk Piazza Unità d'Italia, Trieste

VIRTUOUS AGRICULTURE: ALLY FOR THE ENVIRONMENT AND HUMAN HEALTH?

Section Meetings with Science

Participants

Luciano Navarini, illycaffè Research and Scientific Coordination Manager

Natalia Rosso, senior researcher of the Italian Liver Foundation

Claudio Tiribelli, scientific director of the Italian Liver Foundation

Luca Turello, illycaffè agronomic experimentation manager

Moderator: Cristina Serra, science journalist, TWAS - Public Information Office

Saturday 26 September 2020 16:30 - 17:45 - Museo Revoltella Via A. Diaz, 27, Trieste

ARTIFICIAL INTELLIGENCE AT THE SERVICE OF GENOMICS: A NEW FRONTIER IN PERSONALIZED MEDICINE

Section Meetings with science

Participants

Diego Sardon, Bilimetrix CEO

Fulvio Sbroiavacca, Director of Innovation and ICT Government Insiel

Roberto Sirica, bioinformatician Centro Ames

Claudio Tiribelli, scientific director of the Italian Liver Foundation

October 10, 2020 - Extra virgin olive oil, a healthy sea

In occasion of the event Barcolana, FIF participated with Dr. Natalia Rosso at the conference "Extra virgin olive oil, a healthy sea" at the stand of the Chamber of Commerce of Trieste in Piazza Unità d'Italia with the aim of informing citizens not only on the nutritional value but also on the positive effects in terms of prevention, guaranteed by the daily use of extra virgin olive oil.

The conference saw the presence of a multidisciplinary team where figures such as the doctor, the researcher and the entrepreneur open a dialogue with the public by making their knowledge available.

It was an important dissemination moment to promote a healthy lifestyle starting from nutrition. It starts from the Hippocratic notions, "health requires the knowledge of the power of natural or processed foods" and from this point of view a multidisciplinary discourse begins, where doctor, researcher and producer talk about such important



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topics as health, prevention and nutrition.

Speakers:

Dr. Natalia Rosso, senior scientist of the Italian Liver Foundation

Prof. Antonella Calabretti, professor of Food Chemistry and Pharmaceutical Legislation, at the University of Trieste

Elena Parovel, entrepreneur from Trieste and pillar of the "Promoting Committee for the enhancement of Trieste extra virgin olive oil "

Prof. Bruna Scaggiante, professor of Molecular Biology at the University of Trieste and president of the LILT of Trieste

Prof. Deborah Bonazza, referral for the research of the Unit of Pathological Anatomy and Histology and professor of Anatomy and Histology at the University of Trieste

October 28, 2020 - Meeting between the FIF leaders and the President and Vice-President of the FVG Region

The meeting between the President and the Vice-President of the Region with the President, Vice-President and Scientific Director of the FIF allowed to verify the active interaction existing between the two institutions and to discuss the future, also with a view to expanding participation in FIF and of a possible interregional collaboration with the Veneto Region. The meeting was mutually appreciated.

November 27, 2020 - FIF at Sharper - Researchers' Night

On 26, 27 and 28 November Trieste hosts the Researchers' Night. Exclusively online, the international event, promoted by the European Commission, involved thousands of researchers in hundreds of European cities. The public was able to follow the different activities from home (or from school): spaced out, but participating in a collective event. In Trieste SHARPER is organized by the Immaginario Scientifico together with the Municipality of Trieste and the scientific bodies of the Protocol of Understanding "Trieste City of Knowledge", which also includes the Italian Liver Foundation, in collaboration with other institutions and associations of the city and centers of research of the city system.

FIF took part in the online event scheduled for Friday 27 November at 7.00 pm:

MANGIO ERGO SUM. FOOD CHOICES MAKE US BE WHAT WE ARE

Natalia Rosso, senior researcher Italian Liver Foundation, introduced by Daniele Tavagnacco, Science Industries Association

The "modern" lifestyle directly affects our daily food choices. We don't eat the same way our parents ate, and our children don't eat the way we ate at their age. These variations in the type of food have consequences in our body. In this meeting we will discuss the effect that our food choices have on our health.

November 27, 2020 - New president of the FIF Scientific Committee



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The meeting of the Steering Committee on November 27, 2020 formalized the prestigious appointment of **Prof. Francisco E. Baralle** as President of the Scientific Committee of the Italian Liver Foundation.

Biographical notes:

Degree and Doctorate in Chemistry and Medicine. After completing his PhD in the Department of Organic Chemistry at the University of Buenos Aires, he moved to the Instituto de Investigaciones Bioquímicas Fundación Campomar directed by Luis F Leloir (Nobel Prize in Chemistry in 1970). In 1974 he moved to the MRC - Laboratory of Molecular Biology in Cambridge (UK), where he worked in the Division headed by Dr. Frederick Sanger (also Nobel Prize in Chemistry in 1958 and 1980).

From 1980 to 1990 he was a lecturer in pathology at the University of Oxford and a member of Magdalen College. In 1980 he was elected a member of the European Molecular Biology Organization (EMBO). In 1993 he was awarded the Platinum Konex Prize for Science and Technology (Argentina) as the best scientist of the decade in genetics and cytology and in 2001 he was elected a member of the Argentine Academy of Sciences.

In 2010 he was elected a member of the World Academy of Sciences (TWAS), awarded the Gold Plate of the University of Nova Gorica for international cooperation and the Raices Prize for the promotion of scientific cooperation with Argentina and in 2014 he was awarded an MD Honoris Causae from the Faculty of Medicine of Montevideo. In 2016 he was appointed Copernicus Visiting Scientist of the University of Ferrara. In September 1990 he was appointed Director of the Trieste Component of the ICGEB (International Center for Genetic Engineering and Biotechnology) and between 2004 and 2014 he was General Director of the same institute, with its three Components of Trieste, New Delhi and City del Capo, while continuing his research activities at the same institute until 2017.

As far as his scientific results are concerned, it should be remembered that in 1977, Prof. Baralle published the messenger RNA sequence encoding beta-globin, the first complete primary structure of a eukaryotic mRNA. In 1979, his team isolated the gene for human epsilon globin, a component of human embryonic hemoglobin. He also contributed to the study of the genetic factors involved in susceptibility to hypertension, atherosclerosis and coronary heart disease. He was one of the first to describe the pre-mRNA alternative splicing process in the 1980s, and has since been instrumental in understanding the molecular mechanisms involved in this important cellular process, in both healthy and sick people. Prof. Baralle led the mis splicing and disease project within the European network of excellence for alternative RNA splicing (EURASNET) which involved close European collaborations in basic and clinical research. More recently he has focused his studies on a splicing factor, TDP 43, which plays a fundamental role in the pathogenesis of Amyotrophic Lateral Sclerosis (ALS). Furthermore, in addition to the basic research fields mentioned above, he founded the ICGEB Biotechnology Development group and transferred the technology for the production of recombinant biopharmaceuticals to developing countries in South



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America, Africa and Asia. After leaving the ICGEB in 2018 he became a member of the Scientific Committee of the Italian Liver Foundation where he is also a Guest Scientist.

5. INTERNATIONAL COOPERATION

In 2020, the Foundation successfully continued the international cooperation activities already initiated with the historic partner countries and established new ones

ARGENTINA
AUSTRIA
BRAZIL
CZECH REPUBLIC
PHILIPPINES
FRANCE
INDIA
INDONESIA
MEXICO
SLOVENIA
USA
VIETNAM
UK
BELGIUM
GREECE

Underlining once again the international vocation in the educational and scientific fields, in 2020, thanks to pre-existing international agreements, several researchers spent a period at the FIF to carry out research activities. Their names are listed below:

- i. Sri Jayanti, LPDP Indonesia
- ii. Yogi Muhammad Pratama, LPDP Indonesia
- iii. Kay Loraine Cabral, DOST-PCHRD Philippines
- iv. Noel Salvoza, DOST-PCHRD Philippines
- v. Gisela Weiz, National University of La Pampa (Argentina)

The arrival of a further researcher from Vietnam, Dr. Minh Kieu Le, from Ho Chi Minh University and funded with FVG International Relations funds - scheduled for September 2020 has been postponed due to the Covid19 pandemic.

6. COLLABORATIONS WITH CLINICAL CENTERS

The Italian Liver Foundation carries out its translational research mission in the field of liver disease through close clinical and scientific collaboration with numerous hospitals and clinical centers in Italy and around the world. Below is the list of centers.



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NATIONAL CLINICAL CENTERS

Friuli Venezia Giulia

Giuliano Isontina University Health Authority (ASU GI)
SC (UCO) Clinical Pathologies of the liver UCO General surgery
SC (UCO) Anatomy and Pathological Histology SC Neurology
SC Transfusion Medicine
Surgical Department of the Gorizia-Monfalcone Hospital, General Surgery at Gorizia and Monfalcone
IRCCS Maternal Infant Burlo Garofalo
Neonatology
Advanced microbiology
IRCSS CRO Aviano (PN)
SOC Experimental and Clinical Pharmacology
Integrated University Hospital of Udine
DS Liver Transplantation Medical clinic

Veneto

Integrated University Hospital of Verona
USE Liver Transplant Center
Polyclinic of the Hospital of Padua
Department of Medicine

Trentino Alto Adige

Bolzano hospital
Gastroenterology, Pathophysiology and Digestive Endoscopy

Lombardy

Milano Bicocca University
Department of Medicine and Surgery
IRCSS San Raffaele Hospital, Milan
Immunobiology of HIV Unit

Piedmont

Italian Auxological Institute, Piancavallo (VB) – Auxology Unit

Emilia Romagna

University Hospital of Modena
SC Gastroenterology

Tuscany

Pisan University Hospital



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Lazio

UO Hepatology

The RCCS Gemelli University Hospital Rome

Internal Medicine and Gastroenterology Columbus

IRCCS Bambin Gesù Pediatric Hospital

Molecular Genetics Unit

Campania

National Institute for Cancer Treatment "Fond. Pascale" Naples

UNIT Molecular Biology and Viral Oncology

Sicily

Gaetano Martino Polyclinic University Hospital, Messina

UNIT Clinical and Biomolecular Hepatology

INTERNATIONAL CLINICAL CENTERS :

- Fundacion Favaloro Buenos Aires (Argentina)
- Sociedade Brasileira de Hepatologia, São Paulo (Brazil)
- Medica Sur, Mexico City (Mexico)
- Eijkman Institute for Molecular Biology and Medicine, Jakarta (Indonesia)
- University Medical Center of Ho Chi Minh City (Vietnam)
- Children's Mercy Hospital, Kansas City (USA)
- University of Ljubljana - Faculty of Medicine (Slovenia)

7. TEACHING ACTIVITY

7.1 Frontal lessons

Dr. Natalia Rosso

Position: Senior Researcher

Lectures in the postgraduate program in Biomedicine, Clinical Research in the Research in Surgery module - 20th April 2020 - University of Ljubljana- Faculty of Medicine

Lecture title: "Research in Surgery - How to prepare a proper laboratory protocol to



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reach the study goals"

Prof. Saveria Lory Crocè

Position : Associate Professor

Degree course: [ME03] MEDICINE AND SURGERY

Course title: 936ME - CI PHYSIOPATHOLOGY AND INTEGRATED PATHOLOGY 1

Didactic unit: GASTROENTEROLOGY [MED / 12]

Master in CLINICAL NUTRITION, DIABETOLOGY AND METABOLISM:
PHYSIOPATHOLOGY AND MULTIDISCIPLINARY PRACTICE MANAGEMENT

Course title: M211-03 PHYSIOPATHOLOGY OF DIGESTION AND ABSORPTION

Postgraduate schools: DISEASES OF THE DIGESTIVE SYSTEM

SSM19 - 10 GASTROENTEROLOGY AND HEPATOLOGY

SSM19-35 - GASTROENTEROLOGY AND HEPATOLOGY

SSM19-48 - NUTRITION IN GASTROENTEROLOGY

SSM19-60 - GASTROENTEROLOGY AND HEPATOLOGY

GERIATRY :

SSM05-31 - DISEASES OF THE DIGESTIVE TRUCK

INTERNAL MEDICINE:

SSM10-30 - GASTROENTEROLOGY

EMERGENCY MEDICINE:

SSM10-30 - GASTROENTEROLOGY

INTERNSHIP ACTIVITIES:

DISEASES OF THE DIGESTIVE SYSTEM

SSM19 - 11 GASTROENTEROLOGY AND HEPATOLOGY

SSM19-36 - GASTROENTEROLOGY AND HEPATOLOGY

SSM19-61 - GASTROENTEROLOGY AND HEPATOLOGY

SSM19-74 - GASTROENTEROLOGICAL CLINICAL RESEARCH

RADIOLOGICALS

SSM16-55 - DISEASES OF THE DIGESTIVE SYSTEM (internship activity)

Coordinator of aggregate office for the specialization school in Gastroenterology,
leader of Verona for the 2015-2016 cohort.

Tutoring for medical students, specialization school in diseases of the digestive system,
internal medicine, geriatrics, and radiology in collaboration with all the doctors of the
liver pathology clinic.

7.2 Degree thesis



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Chiara Andolfi

TITLE : IDENTIFICATION OF NOVEL TARGET GENES OF MICRORNAS IN HEPATOCELLULAR CARCINOMA

Degree Course: Medical Biotechnology

Discussion date : 23/03/2020

Supervisor: Prof. Gabriele Grassi

Co-Supervisors: Dr. Devis Pascut, Dr. Yogi Pratama

Luca Grisetti

TITLE: SERUM MIRNAS AS POTENTIAL DIAGNOSTIC BIOMARKER OF HCC

Degree Course: Functional Genomics Date thread : 20 / 07 /2020

Supervisor: Prof. ssa Chiara Collesi

Co- Supervisors: Dr. Devis Pascut, Dr. Yogi Pratama

Serena Pinci

TITLE: EFFECTS OF BILIRUBIN ON IN VITRO MODELS OF DIABETIC NEPHROPATHY

Degree Course: Functional Genomics

Discussion date : 03/24/2020

Supervisor: Prof. Gabriele Grassi

Co-Supervisors: Dr. Cristina Bellarosa and Dr. Annalisa Bianco

Stephanie Pivetta

TITLE: HEPATOCARCINOMA and NEOANGIOGENESIS INHIBITORS: ANALYSIS OF EFFECTIVENESS and CORRELATION with IMAGING.

Degree course: Medicine and Surgery

Supervisor: Prof. Saveria Lory Crocè

Co-Supervisors: Dr. Alessia Visintin, Dott. Michele Campigotto , Dott. Mauro Giuffrè

Laura Brunetta

TITLE: VIROLOGICAL AND CLINICAL OUTCOMES OF THE TREATMENT OF HEPATITIS C WITH DAA

Supervisor: Prof. Saveria Lory Crocè

Co- Supervisors: Dr. Flora Masutti, Dr. Mauro Giuffrè

Francesca Dottor

TITLE: A COMPARISON OF LIVER BIOPSY AND ELASTOGRAPHY FOR THE EVALUATION OF NON-ALCOHOLIC FATTY LIVER DISEASE AND NON-ALCOHOLIC STEATOHEPATITIS IN BAR-IATRIC PATIENTS: THE IMPACT OF SKIN TO LIVER DISTANCE

Supervisor: Prof. Saveria Lory Crocè

Co-Supervisors: Dr. Cristiana Abazia, Dr. Mauro Giuffrè



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Marco Balducci

TITLE: THE APPLICATION OF THE VARICE PROTOCOL IN PATIENTS AFFECTED BY HEPATIC CIRRHOSIS AS A PRIMARY PROPHYLAXIS IN BLEEDING OR FROM ESOPHAGEAL VARICES.

Supervisor: Prof. Saveria Lory Crocè

Co-Supervisors: Dr. Mauro Giuffrè

Veronica Tambosco

TITLE: MALNUTRITION AND SARCOPENIA IN HEPATIC CIRRHOSIS: ROLE OF NUTRITIONAL TREATMENT

Supervisor: Prof. Michela Zanetti

Co-supervisor: Prof. Lory Saveria Crocè

7.3 Doctoral thesis

Mh. Yogi Pratama

TITLE: TRANSLATIONAL STUDIES ON MICRORNA IN HEPATOCELLULAR CARCINOMA: FROM DIAGNOSTIC AND PROGNOSTIC BIOMARKERS TO MOLECULAR EFFECTORS

Doctoral School : Molecular Biomedicine

Date discussion 23 /10/ 2020

Supervisors: Prof. Claudio Tiribelli , Dr. Devis Pascut

Co-Supervisor: Dr. Devis Pascut

7.4 Specialization thesis

Dr. Rossano Buonocore

TITLE: ECOENDOSCOPIC PALLIATION OF INOPERABLE PANCREATIC CANCER PAIN: SAFETY AND EFFECTIVENESS OF CELIAC PLEXUS NEUROLYSIS WITH SINGLE CENTRAL INJECTION

Supervisor: Prof. Saveria Lory Crocè

Co- Supervisor: Dr. Raffaele Manta

8. SEMINARS AND CONGRESSES HELD BY THE FOUNDATION

8.1 Annual meeting of the Scientific Committee

The fourteenth meeting of the Scientific Committee (CS) of the FIF took place on Thursday 19 November 2020 , held this year in virtual version due to the COVID19 pandemic. While not being able to interact physically, this has allowed numerous FIF



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collaborators all over the world to follow the work.

The work began with the greetings of the FIF president, Decio Ripandelli, who, after introducing himself, expressed his satisfaction in filling the new role. The Scientific Director, Claudio Tiribelli, then started the work, thanking in particular those who, connected from the Philippines, Mexico and Argentina, were giving up the hours of rest to participate in the SC.

The lecture "Bilirubin in health and diseases" was given by Prof. Libor Vitek of the University of Prague who talked about bilirubin in its protective and pathological aspects.

It was then the turn of the FIF Senior Scientists who presented the results obtained in the last year with particular attention to future prospects. The presentations ranged over all the research lines present ranging from the molecular mechanisms of bilirubin neurotoxicity in the newborn, to the protective aspects of mild hyperbilirubinemia in Parkinson's and metabolic syndrome, to the search for non-invasive biomarkers for the progression of steatohepatitis into fibrosis, the possibility of using miRNA to monitor the effect of therapy in HCC and make an early diagnosis, the different profiles of cancer stem cells in hepatocarcinoma depending on the etiology and geographic origin. The numerous collaborations at Italian, European and world level have been highlighted which have made it possible to publish 45 works this year with a total impact factor of 244. At the end, prof. Tiribelli also announced that, despite the limitations relating to travel due to the pandemic, the FIF has worked to organize a busy schedule of Yellow Webinars, available to all from the FIF website, which will include the interventions of top-level scientists in the field of hepatology. They started on November 30th on a monthly or bi-monthly basis.

As usual, at the end the date of the next annual meeting of the SC was announced which will be November 18, 2021.

8.2 YELLOW WEBINARS

The series of online meetings Yellow Webinars organized by the Italian Liver Foundation with the participation of world-renowned experts in the hepatology field started on November 30, 2020 on a monthly or bimonthly basis.

The launch of the Yellow Webinars adds an important activity to the multitasking role of the Italian Liver Foundation. As the 2020 pandemic has fundamentally changed our lives, we have decided to transform traditional Yellow Seminars into Yellow Webinars by allowing FIF to better and widely spread the scientific message and, at the same time, reduce travel expenses.

Yellow Webinars are held on the Zoom video conferencing platform, with free participation. The account can accommodate up to 100 attendees.

The Yellow Webinars Calendar has been prepared thanks to the suggestions of the whole FIF Team and is available on the liver.it website.

Below are the first two Yellow Webinars for the year 2020, which were held on November 30 and December 14, 2020 :



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30/11/2020 h.14.00 (2.00 PM CET)

Prof. Rafael Radi, MD, PhD Professor and Chair of Biochemistry

Director, Centro de Investigaciones Biomédicas (CEINBIO)

Universidad de la República, Montevideo, Uruguay

Title: *Nitric Oxide, Peroxynitrite and Protein Tyrosine Nitration: Disruption of Redox Pathways in Human Disease*

14/12/2020 h.14.00 (2.00 PM CET)

Gabriel Gondolesi, MD

Director, Multiorgan Transplant Institute, Fundacion Favaloro,

Associate Professor of Surgery, Favaloro University, Buenos Aires, Argentina

Title: *Development and evolution of Translational Research as part of the clinical Abdominal Transplant Program at Fundacion Favaloro*

9. RESEARCH ACTIVITIES

9.1 Research grants and Grants

AUTONOMOUS REGION FVG - INTERNATIONAL PROJECTS E HUMANITY INTERVENTIONS

Resolution of the Regional Council n. 2195 dd 20/12/2019

1) "Validation in vivo and development of new cryopreservation techniques for hepatic cells and organ as a whole"

Partners: CAIC of Rosario and Fundacion Favaloro of Buenos Aires.

Contribution obtained for 2020 : € 17,518.25

2) "Training in Molecular Hepatology and development of the liver research network in Indonesia"

Partners: Eijkman Institute for molecular biology (EJ);

Hasannudin University (UNHAS).

Contribution obtained for 2020 : € 24,452.55

3) "Translational research on Hepatocellular Carcinoma in Vietnam"

Partners: University Medical Center - Ho Chi Minh City.

Contribution obtained for 2020 : € 16,423.36

FONDAZIONE CR TRIESTE

Title: " Fatty Liver Project (Pro.Fe.Gra) "

PI: Natalia Rosso

Contribution obtained for 2020: € 50,000



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BENEFICIENTIA STIFTUNG

Title: " Translational approach to mild hyperbilirubinemia "

PI: Cristina Bellarosa

Contribution obtained for 2020: € 31,558

AIFA

Title: " Gender-related response to Tyrosine Kinase-Inhibitor drugs in hepatocellular carcinoma"

PI: Devis Pascut

Contribution obtained for 2020: € 37.275

MAT CONSULTING

Title: "Splicing Factors: Mis-folding, aggregation and low tissue levels during aging, role in the onset of degenerative diseases"

PI: prof. Francisco Baralle

Contribution obtained for 2020: € 9,200

Research Contracts :

University of Basilicata

Title: "POTENTIAL ANTIMETASTATIC ACTIVITY OF ABC MEMBRANE PROTEIN INHIBITORS ON LIVER AND COLON CARCINOMA (in Vitro)"

Total service: € 16.500

ABResearch, Phase I and II

Title: "Assessment of the effects ABR compounds in an in vitro model of MAFLD" .

Total service: € 14.683

9.2 Research activities in progress

- Identification and validation of serum biomarkers for the diagnosis and prognosis of fatty liver disease
- Study of the molecular mechanisms involved in the progression from NAFLD to NASH Therapeutical approaches for NAFLD and NASH: study of natural compounds
- Stem cells and cancer stem cells in the progression of liver disease
- Immunotherapy in heterogeneous HCC cells Inhibition of hyaluronic acid in liver cancer
- Identification and isolation of circulating cancer stem cells of hepatocellular carcinoma and their pattern post-curative treatment
- Analysis of miRNA profiles in HCC patients



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- Adaptive mechanisms leading to multidrug resistance in HCC Telomerase regulation in HCC
- APE1 and associated miRNA in serum of HCC patients and healthy blood donors
- The epigenetic of bilirubin induced encephalopathy and brain development in the Gunn rat.
- In vivo pharmacological pre-clinical trial toward bilirubin induced neurotoxicity Bilirubin as Neuroprotective Brain Factor in Neurodegenerative Disorder (s) Molecular focused therapeutical approaches to Parkinson disease
- The most severe phenotype Gunn colony: stabilization of the character and understanding of the possible genetic origin.
- Molecular events associated to ER stress induction by unconjugated bilirubin in in vitro model: Calcium Signaling
- Mild Hyperbilirubinemia protective role against Type 2 Diabetes and Metabolic Syndrome

9.3 Awards, scholarships, other funding sources

In 2020 the FIF obtained numerous awards, travel grants , grants to attend congresses, post-doc grants, various awards which in addition to increasing visibility, indirectly affect the FIF economically .

Personnel:

7 researchers funded by external sources:

- 2 research grants from the Veronesi Foundation
- 2 PhD Hasanudin University, Makassar, Indonesia
- 2 PhD PCHRD Philippines
- 1 research grant from CONICET Argentina

Materials :

Bench fee used during the year for PhD program FIF/UNITS/Hasanuddin University: € 2,000

Bench fee used during the year for PhD program FIF/UNITS/DOST-PCHRD Philippines: € 8,000

Travel Grants:

Caecilia Sukowati, full bursary, EASL Liver Cancer Summit 2020, Prague, Czech Republic, February 6-8, 2020 (€ 650 + free registration + 1-year EASL membership);



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Caecilia Sukowati, travel bursary , Asian Pacific Association for the Study of the Liver (APASL) 2020, Bali, Indonesia, March 4-8 , 2020 (US \$ 600)

10. PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONGRESSES

10.1 Poster presentations

1. Rossana Rauti, Mohammed Qaisiya, Claudio Tiribelli, Laura Ballerini, Cristina Bellarosa. "Bilirubin disrupts calcium homeostasis in neonatal hippocampal neurons: A new pathway of neurotoxicity" SAN2020 XXV Congreso Annual Sociedad Argentina de Investigacion, 7-9, October 2020, VIRTUAL
2. Sukowati C, Anfuso B, Pratama MY, Tiribelli C, Tell G. A novel profile on apurinic/aprimidinic endonuclease/redox effector factor 1 protein in hepatic cancer stem cells. Liver Cancer Summit 2020. European Association for the Study of the Cancer. Prague, Czech Republic. February 2020.
3. Lulli M, Ghini V, Mello T, Sukowati C, Mazzocca A, Turano P, Rombouts K, Andrea Galli, Carloni V. DNA damage response protein checkpoint kinase 2 (CHK2) links chromosomal instability to cellular metabolism in hepatocellular carcinoma (HCC). International Liver Congress 2020. EASL. Digital, August 2020.
4. Devis Pascut, Muhammad Yogi Pratama, Luisa Cavalletto, Chiara Andolfi, Silvia Bresolin, Luca Trentin, Giuseppe Basso, Giorgio Bedogni, Claudio Tiribelli, Liliana Chemello. Circulating Small-RNAs signatures evidenced a susceptibility to HCC occurrence in DAA treated patients. EASL Liver Cancer Summit, 06-08 February, Prague.
5. Muhammad Yogi Pratama, Alessia Visintin, Lory Saveria Crocè, Claudio Tiribelli, Devis Pascut. Circulating miR-4454 as a predictor of therapy response and disease free survival in hepatocellular carcinoma. EASL Liver Cancer Summit, 06-08 February, Prague.

10.2 Oral presentations

1. Rossana Rauti , Mohammed Qaisiya, Claudio Tiribelli, Laura Ballerini, Cristina Bellarosa. "Bilirubin disrupts calcium homeostasis in neonatal hippocampal neurons: A new pathway of neurotoxicity" SAN2020 XXV Congreso Annual Sociedad Argentina de Investigacion, 7-9, October 2020, VIRTUAL



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2. Luong AB, Huy DQ, Tarchi P, Bonazza D, Bottin C, Tran LDC, Doan TPT, Croce LS, Pham HL, Tiribelli C, Sukowati C. Distribution of cancer stem cells mRNA markers in HCC clinical samples: Eastern vs. Western populations. Asia Pacific Association for the Study of the Liver - annual congress 2020. Bali, Indonesia. March 2020.
3. Huy DQ, Luong AB, Bonazza D, Bottin C, Tran LDC, Doan TPT, Tell G, Pham HL, Tiribelli C, Sukowati C. A new role of cancer stem cell marker CD90 / THY-1 in cell autophagy upon chemotherapy. Asia Pacific Association for the Study of the Liver - annual congress 2020. Bali, Indonesia. March 2020.
4. Crocè LS, Speaker "Seminars in liver diseases" - Udine 04-02-2020
5. Crocè LS, Speaker "Decision making in the treatment of patients with liver cancer" - Web Conference 20-06-2020
6. Crocè LS, Speaker "Veneto-Friuli multiregional Expert Input Forum (EIF)" MSD ITALIA- Virtual meeting 21-09-2020

10.3 Publications abstract

1. Luong AB, Huy DQ, Tarchi P, Bonazza D, Bottin C, Tran LDC, Doan TPT, Croce LS, Pham HL, Tiribelli C, Sukowati C. Distribution of cancer stem cells mRNA markers in HCC clinical samples: Eastern vs. Western populations. *Hepato Int* (2020) 14 (Suppl 1): S1 - S470. TO
2. Huy DQ, Luong AB, Bonazza D, Bottin C, Tran LDC, Doan TPT, Tell G, Pham HL, Tiribelli C, Sukowati C. A new role of cancer stem cell marker CD90 / THY-1 in cell autophagy upon chemotherapy. *Hepato Int* (2020) 14 (Suppl 1): S1 - S470.
3. Lulli M, Ghini V, Mello T, Sukowati C, Mazzocca A, Turano P, Rombouts K, Andrea Galli, Carloni V. DNA damage response protein checkpoint kinase 2 (CHK2) links chromosomal instability to cellular metabolism in hepatocellular carcinoma (HCC). *Journal of Hepatology*, Vol. 73, S639 - S64

11. PUBLICATIONS

During 2020, the scientific production of the Italian Liver Foundation doubled compared to the previous year with 38 full papers, 21 reviews and 2 book chapters . The total Impact Factor was 287.2, corresponding to an average IF of 23.9 per person . Below is the detailed list of published works.



11.1 Full papers (peer reviewed journals)

1. Bedogni G, Gastaldelli A, Foschi FG Fatty liver, cardiometabolic disease and mortality *Curr Opin Lipidol*, 2020 Feb; 31 (1): 27-31doi: 101097/MOL0000000000000652
2. Rauti R, Qaisiya M, Tiribelli C, Ballerini L, Bellarosa C Bilirubin disrupts calcium homeostasis in neonatal hippocampal neurons: A new pathway of neurotoxicity *Arch Toxicol* 2020 Mar; 94 (3): 845-855 doi: 101007 / s00204-020-02659 -9 Epub 2020 Mar 3
3. Pratama MY, Cavalletto L, Tiribelli C, Chemello L, Pascut D Selection and validation of miR-1280 as a suitable endogenous normalizer for qRT-PCR analysis of serum microRNA expression in hepatocellular carcinoma *Sci Rep* 2020 Feb 21; 10 (1): 3128 doi: 101038/s41598-020-59682-0
4. Giovanni Raimondo, Carlo Saitta, Daniele Lombardo, Pablo J Giraudi, Natalia Rosso, Antonio Ieni, Salvatore Lazzara, Silvia Palmisano, Deborah Bonazza, Angela Alibrandi, Giuseppe Navarra, Claudio Tiribelli, Teresa Pollicino Occult hepatitis B virus infection predicts non-alcoholic steatohepatitis in severely obese individuals from Italy. *Liver International* DOI: 10.1111/level.14473
5. Rimini M, Casadei-Gardini A, Ravaioli A, Rovesti G, Conti F, Borghi A, Dall'Aglio AC, Bedogni G, Domenicali M, Giacomoni P, Tiribelli C, Bucchi L, Falcini F, Foschi FG, Bagnacavallo Study Group Could Inflammatory indexes and metabolic syndrome predict the risk of cancer development? Analysis from the Bagnacavallo Population Study *J Clin Med* 2020 Apr 20; 9 (4): 1177 doi: 103390/jcm9041177
6. Pratama MY, Pascut D, Tamini S, Minocci A, Tiribelli C, Grugni G, Sartorio A Circulating microRNA associated to different stages of liver steatosis in Prader-Willi syndrome and non- syndromic obesity *J Clin Med* 2020 Apr 14; 9 (4) : 1123doi: 103390/jcm9041123
7. Foschi FG, Domenicali M, Giacomoni P, Dall'Aglio AC, Conti F, Borghi A, Bevilacqua V, Napoli L, Mirici F, Cucchetti A, Ercolani G, Gardini AC, Bellentani S, Gastaldelli A, Giuffrè M, Tiribelli C, Bedogni G; Bagnacavallo Study Group Is there an association between commonly employed biomarkers of liver fibrosis and liver stiffness in the general population ? *Ann Hepatol* Jul-Aug 2020; 19 (4): 380-387 doi: 101016 / jaohep202004003 Epub 2020 May 12 PMID: 32451205 DOI: 10.1016/j.aohep.2020.04.003]
8. Gurian E, Giraudi P, Rosso N, Tiribelli C, Bonazza D, Zanconati F, Giuricin M, Palmisano S, de Manzini N, Sergio V, Bonifacio A. Differentiation between stages of non-alcoholic fatty liver diseases using surface-enhanced Raman spectroscopy . *Anal Chim Acta*. 2020 May 8; 1110: 190-198. doi: 10.1016/j.aca.2020.02.040. Epub 2020 Feb 22. PMID: 32278395



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9. Anfuso B , Tiribelli C , Adorini L , Rosso N . Obeticholic acid and INT-767 modulate collagen deposition in a NASH in vitro model. *Sci Rep.* 2020 Feb 3; 10 (1): 1699. doi: 10.1038/s41598-020-58562-x.
10. Giraudi PJ, Giuricin M, Bonazza D, de Manzini N, Tiribelli C, Palmisano S, Rosso N. Modifications of IGF2 and EGFR plasma protein concentrations in NAFLD patients after bariatric surgery. *Int J Obes (Lond).* 2020 Sep 17. doi: 10.1038/s41366-020-00687-0
11. Giuffrè M, Giuricin M, Bonazza D, Rosso N, Giraudi PJ, Masutti F, Palmucci S, Basile A, Zanconati F, de Manzini N, Tiribelli C, Palmisano S, Crocè LS. Optimization of Point-Shear Wave Elastography by Skin-to-Liver Distance to Assess Liver Fibrosis in Patients Undergoing Bariatric Surgery . *Diagnostics (Basel).* 2020 Oct 7; 10 (10): 795. doi: 10.3390/diagnostics10100795
12. Gazzin & Riordan. " Commentary on the Don Ostrow Trieste Yellow Retreat 2019: A successful biennium, what next?" *Ped. Res.* 2020. DOI: 10.1038/s41390-020-0767-z
13. Moretti, Caruso, Storti, Saro, Kassabian, Sala, Giannini, Gazzin . " Behavior in subcortical vascular dementia with sight pathologies: visual hallucinations as a consequence of precocious gait imbalance and institutionalization ". *Neurological Sciences.* 2020. DOI: 10.1007/s10072-020-04445-y.
14. Moretti, Caruso, Monguzzi, Sala, Dal Ben, Gazzin. " Is Parkinson's disease an unique clinical entity? Rigid or tremor dominant PD: Two faces of the same coin ". *Journal of Clinical Neuroscience.* 2020. 18-24. DOI: 10.1016/j.jocn.2020.01.068.
15. Do HQ, Luong AB, Bonazza D, Bottin C, Doan TP, Tran LD, Truong NH, Tell G, Pham HL, Tiribelli C, Sukowati CH. Differential capacity of CD90 + cells in autophagy activation following chemotherapy in hepatocellular carcinoma . *Ann Hepatol.* 2020 Aug 1: S1665-2681 (20) 30080-6. doi: 10.1016/j.aohep.2020.07.007
16. Ricco G, Cosma C, Bedogni G, Biasiolo A, Guarino M, Pontisso P, Morisco F, Oliveri F, Cavallone D, Bonino F, Plebani M, Brunetto MR Modeling the time-related fluctuations of AFP and PIVKA-II serum levels in patients with cirrhosis undergoing surveillance for hepatocellular carcinoma *Cancer Biomark* 2020 Jul 3 doi: 103233/CBM-190118
17. Bettini G, Saia G, Valsecchi S, Bedogni G, Sandi A, Bedogni A Three-dimensional CAD / CAM reconstruction of the iliac bone following DCIA composite flap harvest *Int J Oral Maxillofac Surg* 2020 Jun 23: S0901-5027 (20) 30201- 0 doi: 101016/j.jjom202005014



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18. Bedogni G, Bertoli S, De Amicis R, Foppiani A, De Col A, Tringali G, Marazzi N, De Cosmi V, Agostoni C, Battezzati A, Sartorio A External validation of equations to estimate resting energy expenditure in 2037 children and adolescents with and 389 without obesity: a cross-sectional study *Nutrients* 2020 May 14; 12 (5): 1421 doi: 103390/nu12051421
19. Giuffrè M, Bedogni G, Abazia C, Masutti F, Tiribelli C, Crocè LS Spleen stiffness can be employed to assess the efficacy of spontaneous portosystemic shunts in relieving portal hypertension *Ann Hepatol* 2020 Aug 20: S1665-2681 (20) 30077-6 PMID : 32828852 DOI: <https://doi.org/10.1016/j.aohep.2020.07.004>
20. Giuffrè M, Fouraki S, Campigotto M, Colombo A, Visintin A, Buonocore MR, Aversano A, Budel M, Tinè F, Abazia C, Masutti F, Crocè LS Alanine aminotransferase and spleno-portal dynamics affect spleen stiffness measured by point shear- wave elastography in patients with chronic hepatitis C in the absence of significant liver fibrosis *J Ultrasound* 2020 Apr 17 doi: 101007/s40477-020-00456-9
21. Sambataro G, Giuffrè M, Sambataro D, Palermo A, Vignigni G, Cesareo R, Crimi N, Torrisi SE, Vancheri C, Malatino L, Colaci M, Del Papa N, Pignataro F, Roman-Pognuz E, Fabbiani M, Montagnani F, Cassol C, Cavagna L, Zuccaro V, Zerbato V, Maurel C, Luzzati R, Di Bella S The Model for Early COvid-19 Recognition (MECOR) Score: A Proof-of- Concept for a Simple and Low-Cost Tool to Recognize a Possible Viral Etiology in Community- Acquired Pneumonia Patients during COVID-19 Outbreak *Diagnostics (Basel)* 2020 Aug 21; 10 (9): E619doi: 103390/diagnostics10090619
22. Giuffrè M, Fouraki S, Comar M, Masutti F, Crocè LS The Importance of Transaminases Flare in Liver Elastography: Characterization of the Probability of Liver Fibrosis Overestimation by Hepatitis C Virus-Induced Cytolysis *Microorganisms* 2020 Feb 29; 8 (3): 348 DOI : 10.3390/microorganisms8030348
23. M Giuffrè, S Di Bella, G Sambataro, V Zerbato, M Cavallaro, AA Occhipinti, A Palermo, A Crescenti, F Monica, R Luzzati, LS Crocè COVID-19-induced Thrombosis in Patients without Gastrointestinal Symptoms and Elevated Fecal Calprotectin: Hypothesis regarding Mechanism of Intestinal Damage Associated with COVID-19 *Trop Med Infect Dis.* 2020 Sep 16; 5 (3): E147. doi: 10.3390/tropicalmed5030147
24. M Giuffrè, P Martingano, LS Crocè, Spontaneous porto-femoral shunting in long-standing portal hypertension *Clinical Case Reports* (2020) 1835-1836 doi: 101002/ccr32947
25. Pratama MY, Visintin A, Croce LS, Tiribelli C, Pascut D Circulatory miRNA as biomarker for therapy response and disease-free survival in Hepatocellular Carcinoma *Cancers* 2020. Accepted



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26. Pascut D, MY Pratama, Gilardi F, M Giuffre, Crocè LS, Tiribelli C . Weighted miRNA co- expression networks analysis identifies circulating miRNA predicting overall survival in hepatocellular carcinoma patients Sci Rep. 2020 Nov 3; 10 (1): 18967. doi: 10.1038/s41598-020-75945-2.
27. Bianco A, Dvořák A, Capková N, Gironde C, Tiribelli C, Furger C, Vitek L, Bellarosa C. The extent of intracellular accumulation of bilirubin determines its anti- or prooxidant effect Int J Mol Sci. 2020 Oct 30; 21 (21): E8101. doi: 10.3390/ijms21218101.
28. Giuffrè M, Bozzato AM, Di Bella S, Occhipinti AA, Martingano P, Cavallaro MFM, Luzzati R, Monica F, Cova MA, Crocè LS Spontaneous rectal perforation in a patient with SARS-CoV-2 infection J Pers Med. 2020 Oct 8 ; 10 (4): E157. doi: 10.3390/jpm10040157.
29. D'Auria E, Panelli S, Lunardon L, Pajoro M, Paradiso L, Beretta S, Loretelli C, Tosi D, Perini M, Bedogni G, Abdelsalam A, Fiorina P, Bandi C, Zuccotti GV Rice flour fermented with *Lactobacillus paracasei* CBA L74 in the treatment of atopic dermatitis in infants: A randomized, double-blind, placebo-controlled trial. Pharmacol Res. 2020 Nov 3: 105284. doi: 10.1016/j.phrs.2020.105284.
30. Bedogni G, Grugni G, Cicolini S, Caroli D, Tamini S, Sartorio A Changes of body weight and body composition in obese patients with Prader-Willi Syndrome at 3 and 6 years of follow-up: A retrospective cohort study. J Clin Med. 2020 Nov 8; 9 (11): E3596. doi: 10.3390/jcm9113596.
31. Gurian E, Di Silvestre A, Mitri E, Pascut D, Tiribelli C, Giuffre M, Croce LS, Sergio V, Bonifacio A Repeated double cross validation applied to the PCA-LDA classification of SERS spectra: a case study with serum samples from hepatocellular carcinoma patients. Anal Bioanal Chem. 2020 Dec 8. doi: 10.1007/s00216-020-03093-7. Online ahead of print.
32. Bianco C, Jamialahmadi O, Pelusi S, Baselli G, Dongiovanni P, Zanoni I, Santoro L, Maier S, Liguori A, Meroni M, Borroni V, D'Ambrosio R, Spagnuolo R, Alisi A, Federico A, Bugianesi E, Petta S, Miele L, Vespasiani-Gentilucci U, Anstee QM, Stickel F, Hampe J, Fischer J, Berg T, Fracanzani AL, Soardo G, Reeves H, Prati D, Romeo S, Valenti L. Non- invasive stratification of hepatocellular carcinoma risk in non-alcoholic fatty liver using polygenic risk scores J Hepatol. 2020 Nov 25; S0168-8278 (20) 33811-3. doi: 10.1016/j.jhep.2020.11.024.
33. Luong AB, Do HQ, Tarchi P, Bonazza D, Bottin C, Cabral LKD, Tran LDC, Doan TPT, Crocè LS, Pham HLT, Tiribelli C, Sukowati CHC . The mRNA distribution of cancer stem cells marker CD90 / Thy-1 is comparable in hepatocellular carcinoma of



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Eastern and Western populations. *Cells* 2020 Dec 12; 9 (12): E2672. doi: 10.3390/cells9122672.

34. Gazzin S, Dal Ben M, Montrone M, Jayanti S, Lorenzon A, Bramanate A, Bottin C, Moretti R, Tiribelli C Curcumin prevents cerebellar hypoplasia and restores the behavior in hyperbilirubinemic Gunn rat by a pleiotropic effect on the molecular effectors of brain damage *Int J Mol Sci*. 2020 accepted

35. Cabas P, Rizzo M, Giuffrè M, Antonello RM, Trombetta C, Luzzati R, Liguori G, Di Bella S. BCG infection (BCGitis) following intravesical instillation for bladder cancer and time interval between treatment and presentation: A systematic review *Urol Oncol*. 2020 Dec 8: S1078-1439 (20) 30624-4. doi: 10.1016/j.urolonc.2020.11.037. Online ahead of print.

36. Giuffrè M, Macor D, Masutti F, Abazia C, Tinè F, Bedogni G, Tiribelli C, Crocè LS. Spleen Stiffness Probability Index (SSPI): A simple and accurate method to detect esophageal varices in patients with compensated liver cirrhosis. *Annals of Hepatology [Internet]* 2020; 19 : 53–61 PMID: 31740162 DOI: <https://doi.org/10.1016/j.aohep.2019.09.004>

37. Cabas P, Di Bella S, Giuffrè M, Rizzo M, Trombetta C, Luzzati R, Antonello RM, Parenzan K, Liguori G. Community pharmacists ' exposure to COVID-19 . *Research in Social and Administrative Pharmacy* 2020; DOI : 10.1016 / j.sapharm.2020.05.020

38. Campigotto M, Giuffrè M, Colombo A, Visintin A, Aversano A, Budel M, Masutti F, Abazia C, Crocè LS. Comparison between hepatocellular carcinoma prognostic scores: A 10-year single-center experience and brief review of the current literature. *World Journal of Hepatology* 2020; 12: 1239–57 [DOI: 10.4254 / wjh.v12.i12.1239]

11.2 Review articles and editorials

1. Gazzin S, Riordan S Don Ostrow Trieste Yellow Retreat 2019: A successful biennium, what next? *Pediatr Res* 2020 Jan 18 doi: 101038 / s41390-020-0767-z

2. Eslam M, Newsome PN, Sarin SK, Anstee QM, Targher G, Romero - Gomez M, Zelber- Sagi S, Wong VW, Dufour JF, Schattenberg J, Kawaguchi T, Arrese M, Valenti L, Shiha G, Tiribelli C, Yki -Järvinen H, Fan JG, Grønbaek H, Yilmaz Y, Cortez-Pinto H, Claudia Oliveira CP, Bedossa P, Adams LA, Zheng MH, Fouad YF, Chan WK, Mendez-Sanchez N, Ahn SH, Castera L, Bugianesi E , Ratziu V, George J A new definition for metabolic associated fatty liver disease: an international expert consensus statement *J Hepatol* 2020 Jul; 73 (1): 202-209 doi: 101016/j.jhep202003039 Epub 2020 Apr 8



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3. Eslam M, Sanyal AJ, George J, on behalf of an international consensus panel (including Tiribelli C) MAFLD: A consensus-driven proposed nomenclature for metabolic associated fatty liver disease *Gastroenterology* 2020 May; 158 (7): 1999-2014e1 doi: 101053/jgastro201911312
4. Salvoza NC, Giraudi PJ, Tiribelli C, Rosso N Sex differences in Non-Alcoholic Fatty Liver Disease: Hints for future management of the disease . 2020 April *Exploration of Medicine*
5. Jayanti , Moretti, Tiribelli, Gazzin " Bilirubin and inflammation in neurodegenerative and other neurological diseases ". *Neuroimmunology & Neuroinflammation*. 2020. DOI: 10.20517/2347-8659.2019.14. - Invited review.
6. Pascut D, Pratama MY, Vo NVT, Masadah R, Tiribelli C The crosstalk between tumor cells and the microenvironment in hepatocellular carcinoma: The role of exosomal microRNAs and their clinical implications *Cancers (Basel)* 2020 Mar 29; 12 (4): 823 doi : 103390/cancers12040823
7. Pascut D, Pratama MY, Tiribelli C HCC occurrence after DAA treatments: Molecular tools to assess the post-treatment risk and surveillance *Hepat Oncol* 2020 Jun 22; 7 (2): HEP21 doi: 102217/hep-2020-0010
8. Natalia Rosso, Adam M. Stephenson, Pablo J. Giraudi, Claudio Tiribelli. Diagnostic management of nonalcoholic fatty liver disease: a transformational period in the development of diagnostic and predictive tools – a narrative review. *Ann Transl Med* 2020 , doi: 10.21037/atm-20-4723
9. Pablo J. Giraudi, Adam M. Stephenson, Claudio Tiribelli, Natalia Rosso. Novel high- throughput applications for NAFLD diagnostics and biomarker discovery . *Hepatoma Res* 2020; 6: xx. <http://dx.doi.org/10.20517/2394-5079.2020.92>
10. Cabral LKD, Tiribelli C, Sukowati CHC. Sorafenib resistance in hepatocellular carcinoma: The relevance of genetic heterogeneity. *Cancers* 2020 Jun 15; 12 (6): 1576. doi: 10.3390/cancers12061576.
11. Vitek L, Tiribelli C Bilirubin, intestinal integrity, the microbiome and inflammation *NEJM* 2020 *N Engl J Med* 2020 Aug 13; 383 (7): 684-686 doi: 101056/NEJMcibr2013250
12. Wennberg RP, Wong RJ, Shapiro SM, Tiribelli C Charles E Ahlfors (1944–2020) *Pediatr Res* 2020 May 6 doi: 101038/s41390-020-0938-y
13. Giuffrè M, Campigotto M, Campisciano G, Comar M, Crocè LS A story of liver and gut microbes: how does the intestinal flora affect liver disease? A review of the



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literature Am J Physiol Gastrointest Liver Physiol 2020 May 1; 318 (5): G889-G906 doi: 10.1152 / ajpgi001612019 Epub 2020 Mar 9 PMID: 32146836
<http://www.ncbi.nlm.nih.gov/pubmed/32146836>

14. Jayanti S, Vitek L, Tiribelli C, Gazzin S The role of bilirubin and other “yellow players” in neurodegenerative diseases Antioxidants 2020. Accepted.

15. Giraudi PJ, Stephenson AM, Tiribelli C, Rosso N Novel high-throughput applications for NAFLD diagnostics and biomarker discovery Hepatoma Research. 2020. Accepted

16. Berni Canani R, Di Costanzo M, Bedogni G, Amoroso A, Cosenza L, Di Scala C, Granata V, Nocerino R. Reply to "Efficacy and safety of hydrolyzed formulas for cow's milk allergy management: A systematic review of randomized controlled trials" . Clin Exp Allergy. 2020 Oct 12. doi: 10.1111/cea.13758. Online ahead of print. Letter

17. Dani C, Hulzebos CV, Tiribelli C Transcutaneous bilirubin measurements: useful, but also reproducible? Pediatr Res. 2020 Nov 10. doi: 10.1038/s41390-020-01242-3. Online ahead of print.

18. Giuffrè M, Colecchia A, Crocè LS Elastography: where are we now? Minerva Gastroenterol Dietol. 2020 Oct 26. doi: 10.23736/S1121-421X.20.02773-7.

19. Giraudi PJ, Stephenson AM, Tiribelli C, Rosso N Diagnostic management of nonalcoholic fatty liver disease: a transformational period in the development of diagnostic and predictive tools - a narrative review Annals of Translational Medicine. Accepted

20. Giuffrè M, Moretti R, Campisciano G, da Silveira ABM, Monda VM, Comar M, Di Bella S, Antonello RM, Luzzati R, Crocè LS You Talking to Me? Says the Enteric Nervous System (ENS) to the Microbe. How Intestinal Microbes Interact with the ENS J Clin Med 2020 Nov 18; 9 (11): 3705. doi: 10.3390 / jcm9113705. Review

21. Giuffrè M, Campigotto M, Colombo A, Visintin A, Budel M, Aversano A, Navarra L, Piccin A, Cavalli CA, Sigon R, Tiné F, Abazia C, Masutti F, Crocè LS. The role of elastography in alcoholic liver disease: fibrosis staging and confounding factors. A review of the current literature. Minerva Gastroenterol Dietol. 2020 Nov 19. doi: 10.23736 / S1121-421X.20.02777-4. Online ahead of print.

11.3 Book chapters



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1. Liver Diseases A Multidisciplinary Textbook - Natalia Rosso and Stefano Bellentani
Chapter 26 Pages 273-284 2020 S BN 978-3-030-24431-6 ISBN 978-3-030-24432-3 (eBook)
<https://doi.org/10.1007/978-3-030-24432-3> Springer Nature Switzerland AG 2020
2. DiStefano J, Sukowati C. lcnRNA-mediated regulation of acquired chemoresistance in HCC. Chapter of "The Chemical Biology of Long Noncoding RNAs. Springer book 2020.

12. PRESS RELEASE

RadioRAI FVG 18 February 2020

Broadcast "RADAR - Signals from science, culture, society"

Interview with Prof. Claudio Tiribelli entitled: "Liver: research and initiatives. ESOF 2020. "

<https://www.prefettura.it/trieste/>

21 February 2020

"Visit to the headquarters of the Italian Liver Foundation at the Science Park Area of Trieste"

<https://www.comune.trieste.it/>

16 July 2020

Meeting of the Mayor Roberto Dipiazza with the new president of the Italian Liver Foundation, Decio Ripandelli

"Il Piccolo", July 17, 2020 pag. 22

Liver Foundation: FIF leaders received in the Town Hall

The president and scientific director received by the Mayor Dipiazza

RAI TV News TGR Friuli Venezia Giulia 9 September 2020

Edition h. 19.30

Bilirubin, ally of our health

Report on the research by the FIF on the protective properties of slightly elevated bilirubin values in the blood.

RAI TV News TGR Friuli Venezia Giulia 25 September 2020

Edition 2.00 pm

Science is an emotion

Report on the 2020 edition of Trieste Next, in which the Italian Liver Foundation participates with an interactive activity on the stand and two conferences