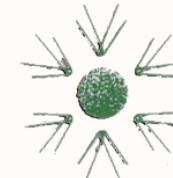




REGIONE PUGLIA  
COORDINAMENTO TECNOPOLPO



UNIVERSITÀ  
DEGLI STUDI DI BARI  
ALDO MORO



Istituto Tumori  
Giovanni Paolo II  
Irress Bari

# TecnoMedPuglia

Tecnopolpo per la medicina di precisione

Scientific Symposium

Lecce, 13 September, 2022

CNR NANOTEC – SEMINAR ROOM “RITA LEVI MONTALCINI”

#### COORDINATION

Felice Ungaro, Giuseppe Gigli, Giancarlo Logroscino, Massimo Tommasino

#### LOCAL ORGANISING COMMITTEE

Loretta L. Del Mercato, Francesca Gervaso, Ilaria E. Palamà, Giorgia Rollo, Gabriella Zammillo

9:30–9:45	<b>OPENING AND WELCOME MESSAGE</b>	Felice Ungaro Giuseppe Gigli	Regione Puglia Cnr Nanotec
Session 1 9:45–10:55	<b>LIQUID BIOPSY AND BIOMARKERS</b> Chairperson: Stefania Tommasi (OncoBa) and Elisabetta Primiceri (Nanotec)		
8' (5't+3'd)	Colon cancer, biomarkers and immunotherapy	Stefania Tommasi Simona De Summa	OncoBa
	Extracellular vesicles as biomarkers	Amalia Azzariti	OncoBa
	Body fluids biomarkers for identification of HPV infections and their contribution to carcinogenesis using luminex-based assays	Massimo Tommasino	OncoBa
	Lab on a Chip for critical parameters monitoring in CAR-T production process: TITAN project	Francesco Ferrara	Nanotec
	Biosensing by Chiral Structures	Adriana Passaseo	Nanotec
	Clinical research tools: fluid biomarkers for early diagnosis and advanced genetics for neurodegenerative diseases	Chiara Zecca, Maria Teresa Dell'Abate	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
10' (7't+3'd)	Irisin/fndc5 system as a biomarker and countermeasure in muscular atrophy in neurodegenerative and aging diseases	Maria Grano	Uniba
	Irisin, diabetes and neurodegenerative diseases	Francesco Giorgino	Uniba
10:55-11:10	COFFEE BREAK		
Session 2 11:10-12:10	<b>HIGH RESOLUTION IMAGING</b> Chairperson: Salvatore Nigro (Centro Malattie Neurodegenerative) and Alfredo Zito (OncoBa)		
8' (5't +3'd)	Digital pathomics in colon carcinomas	Simona De Summa	OncoBa

	<b>Radiomic in colorectal cancer and melanoma</b>	Annarita Fanizzi Raffaella Fanizzi	Oncoba
	<b>Development of novel contrast agents for functional X-ray tomography based on an immunohistochemical approach (IH-XPCT) for the early detection of neurodegenerative disease</b>	Alessia Cedola	Nanotec
	<b>Quantitative MRI in neurodegenerative disorders</b>	Giuseppe Palma	Nanotec
	<b>Advanced MRI techniques to investigate structural brain alterations in patients with neurodegenerative diseases</b>	Salvatore Nigro	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
	<b>Artificial intelligence models to investigate MRI structural changes and neural correlates in patients with neurodegenerative diseases</b>	Benedetta Tafuri	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
	<b>Sleep/wake profile and circadian motor activity rhythm in Behavioral Variant Frontotemporal Dementia</b>	Marco Filardi	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
<b>Session 3</b> <b>12:10-12:40</b>	<b>NANO MEDICINE</b> Chairperson: Amalia Azzariti (Oncoba) and Stefano Loporatti (Nanotec)		
8' (5't +3'd)	<b>Micro lipidic structures and treatments of skin lesions-Background</b>	Raffaele Filotico	Oncoba
	<b>Micro lipidic structures and treatments of skin lesions-Results</b>	Alessandra Quarta	Nanotec
	<b>Nanovectors for drug/gene delivery in the frontier of precision medicine</b>	Ilaria E. Palamà	Nanotec
<b>Session 4</b> <b>12:40-12:57</b>	<b>IMMUNOLOGY OF NEURODEGENERATIVE AND ONCOLOGIC DISEASES</b> Chairperson: Attilio Guarini (Oncoba) and Giancarlo Logroscino (Centro Malattie Neurodegenerative)		
8' (5't +3'd)	<b>Academic CAR-T Feasibility study on cell factory</b>	Attilio Guarini, Mauro Cives	Oncoba
	<b>Role of micro-environment in lung cancer and melanoma</b>	Michele Guida, Domenico Galetta	Oncoba

Session 5 12:57–13:55	<b><i>IN VITRO 3D MODELS</i></b> Chairperson: Letizia Porcelli (OncoBa) and Loretta L. del Mercato (Nanotec)		
8' (5't +3'd)	Organoids as an <i>in vitro</i> model for human cancers	Letizia Porcelli, Mariella Vegliante	OncoBa
	3D <i>in vitro</i> disease models: technological and biological tools	Alessandro Polini, Pamela Mozetic	Nanotec
	3D <i>in vitro</i> disease models: applications @Nanotec	Francesca Gervaso, Valentina Onesto	Nanotec
	Tumour microenvironment and cancer: unravelling the molecular links and cell response	Barbara Cortese, Riccardo Rizzo	Nanotec
15' (10'+5')	The measure of proNGF in CSF by a new automated immunoassay increases the diagnostic performance of the clinically validated biomarkers in Alzheimer's Disease and Frontotemporal Dementia	Francesca Malerba	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
13:55–15:00	LUNCH & POSTER SESSION*		
15:30–17:00	DISCUSSION, CONCLUSIVE REMARKS AND FUTURE PERSPECTIVES		

13.55 – 15:00 * POSTER SESSION		
1	Bio-based photoreceptors for Quantum Technologies <i>Ilaria Cardace, Vincenzo Ardizzone, Adriano Cola, Luisa De Marco, Lorenzo Dominici, Giuseppe Gigli, Daniele Sanvitto</i>	Nanotec
2	Hyaluronic acid hydrogels with tunable mechanical properties for the realization of soft 3D matrix, injectable systems and bioink <i>M. Grieco, B. Cortese, V. De Turris, S. M. Giannitelli, E. Mauri, A. Rainer, C. Sappino, A. Capodilupo, G. Gigli, L. Moroni, O. Ursini</i>	Nanotec
3	Chiral Metasurfaces for Femtomolar Biosensing <i>Manoccio, Esposito, Primiceri, Tasco, Cuscunà, Gigli, Passaseo</i>	Nanotec

4	<b>Modeling human gut and liver diseases in vitro</b> <i>Chiara Coricciati, Eleonora Mello, Elisa De Luca, Alessio Bucciarelli, Elena Clabassi, Alberto Ferraro, Giuseppe Gigli, Pamela Mozetic, Alberto Rainer</i>	Nanotec
5	<b>Biomimetic Platforms for in vitro Cell Growth and Cancer Nanomedicine Delivery</b> <i>Stefania Forciniti, Giuliana Grasso, Valentina Onesto, Riccardo Rizzo, Eliana D'Amone, Giuseppe Gigli, and Loretta L. del Mercato</i>	Nanotec
6	<b>Ratiometric sensing devices for 3D spatio-temporal mapping in cellular microenvironments</b> <i>Francesco Colella, Giuliana Grasso, Helena Iuele, Riccardo Rizzo, Eliana D'Amone, Giuseppe Gigli, and Loretta L. del Mercato</i>	Nanotec
7	<b>Liquid Biopsy: Lab On Chip and microfluidic tools</b> <i>F. Ferrara F., M.S. Chiriacò, G. Siciliano, V. Garzarelli, S. Umme, E. Primiceri</i>	Nanotec
8	<b>Preparation of Calcium Carbonate Nanoparticles with Controlled Size and Morphology via Coprecipitation Method</b> <i>Francesca Persano, Concetta Nobile, Giuseppe Gigli, Stefano Leporatti</i>	Nanotec
9	<b>Microphysiological systems for the study of neurodegenerative diseases in vitro</b> <i>Eleonora De Vitis, Velia La Pesa, Francesca Gervaso, Alessandro Romano, Angelo Quattrini, Giuseppe Gigli, Lorenzo Moroni and Alessandro Polini</i>	Nanotec
10	<b>Light and temperature dual-responsive interpenetrating polymer network for mimicking muscle tissue ECM</b> <i>Antonella Stanzione, Alessandro Polini, Francesca Scalera, Giuseppe Gigli and Francesca Gervaso</i>	Nanotec
11	<b>Asymmetry of radiomics features in the white matter of patients with Primary Progressive Aphasia</b> <i>Benedetta Tafuri, Marco Filardi, Daniele Urso, Valentina Gnoni, Roberto De Blasi, Salvatore Nigro, Giancarlo Logroscino</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
12	<b>Altered structural brain networks in linguistic variants of frontotemporal dementia</b> <i>Salvatore Nigro; Benedetta Tafuri; Daniele Urso; Roberto De Blasi; Alessia Cedola; Giuseppe Gigli; Giancarlo Logroscino</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
13	<b>Plasma levels of Aβ42, Aβ40, t-Tau and NfL as biomarkers of cognitive decline in patients with Parkinson's disease</b> <i>Maria Teresa Dell'Abate, Valeria Preite, Chiara Zecca, Daniele Urso, Marco Filardi, Davide Vilella, Giancarlo Logroscino</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
14	<b>Irisin as a common treatment for type 2 Diabetes and Alzheimer's disease</b> <i>A. Natalicchio, N. Marrano, G. Biondi, A. Borrelli, M. Rella, A. Cignarelli, S. Perrini, L. Laviola, F. Giorgino</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
15	<b>GLP-1 receptor agonist induce irisin secretion in type 2 diabetes patients: potential implications in Alzheimer's disease treatment</b> <i>N. Marrano, G. Biondi, G. Le Grazie, A. Montedoro, L. Di Gioia, F. Guarini, A. Borrelli, M. Rella, A. Cignarelli, S. Perrini, L. Laviola, F. Giorgino, A. Natalicchio</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale

16	<b>The Relationship Between Muscle Strength and Cognitive Performance Across Alzheimer's Disease Clinical Continuum</b> <i>Marco Filardi, Roberta Barone, Giulia Bramato, Salvatore Nigro, Benedetta Tafuri, Maria Elisa Frisullo, Chiara Zecca, Rosanna Tortelli, Giancarlo Logroscino</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
17	<b>Systemic administration of irisin in young mice exerts antidepressant-like effect and upregulates endogenous brain factors</b> <i>Patrizia Pignataro, Manuela Dicarlo, Roberta Zerlotin, Giuseppina Storlino, Clelia Suriano, Lorenzo Sanesi, Cinzia Buccoliero, Angela Oranger, Graziana Colaianni, Maria Grano, Silvia Colucci</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
18	<b>Irisin/fnDC5 system in idiopathic inflammatory myositis (IIM)</b> <i>Roberta Zerlotin, Marco Fornaro, Angela Oranger, Manuela Dicarlo, Patrizia Pignataro, Giuseppina Storlino, Lorenzo Sanesi, Clelia Suriano, Graziana Colaianni, Silvia Colucci, Florenzo Iannone, Maria Grano</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
19	<b>Prolonged treatment with irisin counteracts muscle and trabecular bone loss improving locomotor and exploratory activity in aged mice.</b> <i>Manuela Dicarlo, Angela Oranger, Patrizia Pignataro, Roberta Zerlotin, Giuseppina Storlino, Clelia Suriano, Lorenzo Sanesi, Graziana Colaianni, Silvia Colucci, and Maria Grano</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
20	<b>Irisin is a potential biomarker to predict muscular atrophy and bone loss progression in Charcot-Marie-Tooth Patients</b> <i>Graziana Colaianni, Angela Oranger, Roberto Lovero, Giuseppina Storlino, Patrizia Pignataro, Antonietta Fontana, Francesca Di Serio, Angelica Ingravallo, Giuseppe Caputo, Michele Barone, Alfredo Di Leo, Maria Grano</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
21	<b>Evaluation of serum concentration of Irisin and molecules affecting the musculoskeletal system after 10-day Bed Rest</b> <i>Angela Oranger, Graziana Colaianni, Giuseppina Storlino, Cinzia Buccoliero, Patrizia Pignataro, Roberta Zerlotin, Manuela Dicarlo, Lorenzo Sanesi, Pišot Rado, Maria Grano, Silvia Concetta Colucci</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale
22	<b>Time-dependent unloading effects on muscle and bone: involvement of FNDC5/irisin axis</b> <i>Lorenzo Sanesi, Giuseppina Storlino, Manuela Dicarlo, Angela Oranger, Roberta Zerlotin, Patrizia Pignataro, Clelia Suriano, Gabriella Guida, Maria Grano, Graziana Colaianni, Silvia Concetta Colucci</i>	Centro per le Malattie Neurodegenerative e l'invecchiamento Cerebrale