

## **Personal Information**

Date of Birth: 05 November 1986

Place of Birth: Messina, Italy

Nationality: Italian

Emails: [antomangraviti@gmail.com](mailto:antomangraviti@gmail.com)

## **Education and Training**

February 2022-Present

Research Fellow, Consultant Neurosurgeon

Sant'Andrea University Hospital

Department of Neuroscience, Mental Health and Sense Organs (NESMOS)

Sapienza University of Rome

November 2016- November 2021

Neurosurgery Residency, Summa Cum Laude

Catholic University of the Sacred Heart Rome

2018-2019

Neurosurgery Training during Residency

Department of Neurosurgery (Neurooncological Surgery)

Fondazione I.R.C.C.S. Istituto Neurologico C. Besta Milan

EANS Training Course:

-Vascular, 27-30 June 2021, Valencia

-Head Injury, 1-4 Sept 2019, Brno

-Brain Tumor, 20-24 August 2022, Maastricht

November 2012-March 2016

Research Fellowship in Neuro-Oncology and Neurosurgery

Hunterian Neurological Research Laboratory

Department of Neurosurgery, Johns Hopkins University Baltimore, Maryland

2010-Nov 2012

Clinical Neurosurgery Internship

Department of Neurosurgery (Neurooncological Surgery)

Fondazione I.R.C.C.S. Istituto Neurologico C. Besta Milan

Sept 2005-March 2012

M.D., Summa Cum Laude

University of Pavia, Medical School Pavia, Italy

2000-2005

Undergraduate Education

Liceo Classico F. Maurolico Messina, Italy

### **Certifications:**

Italian Medical license University of Pavia, July 2012

### **Scientific Activity**

40 Accepted abstracts for National and International Scientific Meetings

10 Oral Presentation at International Meetings

Invited Speaker:

- SNO Annual Meeting San Antonio, Texas, USA- November 2015
- 4th International Meeting Updates in Neuro oncology Cortona, Italy- July 2015

Reviewers for 3 international scientific journals

35 Publications in peer-reviewed journals:

1903 Citations, H Index:19.0 Scopus, H. Index 20 .0 Google Scholar

ORCID ID: 0000-0003-2843-0718

The main focus of my translational research is the development of nano-based drug delivery systems for the treatment of brain tumors. I have led pioneering preclinical studies in this field, all published in journals of high impact factor and conducted in close collaboration with international teams in the United States and Europe.

My contributions to the field range from in vivo experiments on the efficacy of gene therapy using local delivery PBAEs to studies on the selective intratumoral delivery of molecules using dendrimers-based formulations after systemic delivery. My other projects have aimed at developing and testing a new formulation for local interstitial chemotherapy using polymeric wafers to deliver new repurposed drugs against glioma

Accolades for the following publication on ACS Nano (IF13.9):

**Mangraviti A**, Tzeng SY, Kozielski KL, Wang Y, Jin Y, Gullotti D, Pedone M, Buaron N, Liu A, Wilson DR, Hansen SK, Rodriguez FJ, Gao GD, DiMeco F, Brem H, Olivi A, Tyler B, Green JJ. Polymeric Nanoparticles for Non-Viral Gene Therapy Extend Brain Tumor Survival In Vivo. ACS Nano. 2015 Feb 24;9(2):1236:

- Editor Choice in Science Translational Medicine
- #1 most read/downloaded ACS Nano paper of 2015 2 months after publication
- Highlighted by ACS Chemical Research in Toxicology
- Press releases on Science Daily, Bioportfolio, Eurekalert, Newswise, PhyNews, NIH.gov

### **Inventions, Patents, Copyrights**

September 2014- Kannan Rangaramanujam, Betty Tyler, Fan Zhang, Panagiotis Mastorakos, Manoj K Mishra, Antonella **Mangraviti**. Approaches for Systemic Targeting of Tumor Macrophages in Brain Tumors- Provisional patent filed.

December 2018- Antonella **Mangraviti**, Betty Tyler, Henry Brem, Alessandro Olivi, Tula Raghavan. Acriflavine, Biodegradable CCP:SA Polymers for the Treatment Of Malignant Glioma- Provisional patent filed.

### **Awards/ Honors**

Harvey Cushing Award

Johns Hopkins School of medicine, 2014

Earl Walker Outstanding International Fellow Award

Johns Hopkins School of medicine, 2015

### **Member**

2015- Congress of Neurological Surgeons

2016- Società Italiana di Neurochirurgia