

Formation of the Euro Parliament Interest Group on Biomedical Engineering (EPIG on BME)

Biomedical Engineering (BME) is one of the faster growing and most impactful branch of engineering. This is widely perceived from healthcare workers or patients, which are directly impacted by BME outputs, as for instance innovative medical devices. Nonetheless, there is a clear lack of attention to BME at political level, especially in Europe. For instance, BME is not officially recognized as profession, BME dedicated funding are missing and scientific organizations of BME are not directly involved in the preparation or revision of European legislation on medical devices, differently from medical scientific societies.

Since 2015, the IFMBE Healthcare Technology Assessment Division (IFMBE HTAD¹), in cooperation with the European Alliance of Medical and Biological Engineering and Science ([EAMBES](#)), worked closely with the European Institutions in order to increase recognition of BME at political level.

A first milestone was achieved in April 2015, when for the first time, European Economic and Social Committee (EESC) stated that “Biomedical Engineering is not simply a subset of modern medicine, but modern medicine predominantly secures important advances through the use of the products of biomedical engineering”².

Starting from this important milestone, in July 2015, Dr Leandro Pecchia, as Chairman of the IFMBE HTAD and EAMBES Public Affair Working Group (PAWG) coordinator, contacted two Euro-Parliamentarian Members, Dr Lara Comi and Dr Nicola Caputo, which agreed to table two Parliamentary Questions. The former³ asking why, different to the USA, the Horizon 2020 vision does not have a dedicated space for BME and the latter⁴ asking why BME is not listed among the professions that the European Commission officially recognizes.

In order to reinforce this political action and to help the European Commission to fully recognize BME as profession and as independents area of research, 3 Parliament Members (MPs), cooperated with EAMBES and IFMBE HTAD to set the first **Euro Parliament Interest Group on Biomedical Engineering (EPIG on BME)**, which was launched the 31st of May: Mr Nicola Caputo (S&D, Italy), which is the President of the EPIG on BME, Jens Gieseke (EPP, Germany) and Ms Lara Comi (EPP, Italy).

Some of the most representative International and European BMEs contributed to prepare and participated to the very constructive discussion, including prof Shankar **Krishnan**, IFMBE Elected President, prof Marc **Nyssen**, IFMBE Treasurer, prof Ratko **Magjarevic**, IFMBE Past President and prof Nicolas **Pallikarakis**, IFMBE HTAD past-Chair.

The following speakers participated to the event:

- Professor Jari Hyttinen, President of [EAMBES](#), which gave an overview of how BME has revolutionized modern medicine;
- Mr. Edgardo Maria Iozia, Rapporteur of [EESC report on biomedical engineering](#) and [Black SWAN](#) President, which presented a report on how BME is a strategic economic and social sector;
- Adriana Velazquez, Senior Advisor and Focal Point of [Medical Devices at World Health Organization](#), which reported on how BME is crucial to face emerging social challenges;

¹ <http://htad.ifmbe.org/>

² <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014IE4419>

³ <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2f%2fEP%2f%2fTEXT%2bWQ%2bE-2015-011613%2b0%2bDOC%2bXML%2bV0%2f%2fEN&language=EN>

⁴ <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2f%2fEP%2f%2fTEXT%2bWQ%2bE-2015-011612%2b0%2bDOC%2bXML%2bV0%2f%2fEN&language=EN>

- John Brennan, Director Regulations & Industrial Policy [Medtech Europe](#), which demonstrated how the medical technology industry sector growth in the past 10 years;
- dr Leandro Pecchia, [IFMBE HTA Division](#) and PAWG [EAMBES](#) Chairman, which presented the vision of the EIP on BME and launched 3 urgent action points that the EIP on BME, supported by the IFMBE and the EAMBE, should face in the next years:
 - to insure that *BME will be inserted in the next revision of the Professional Qualifications Directive*, otherwise patient safety in hospital would remain uncertain and procurement not cost-effective;
 - to recognize *BME scientific organization as official stakeholders in the Medical Devices Coordination Groups*, which is the group responsible for medical devices legislation revision in Europe;
 - to recognize *BME as an independent research area* in Horizon 2020 and forthcoming funding schemes.

A very constructive discussion followed and a fourth action point emerged from the discussion: *to ask the Commission to start a new study on BME to demonstrate, if needed, BME economic and social impact in Europe.*

As result of the day, **Nicola Caputo**, on behalf of the EPIG on BME, accepted bringing those 4 IFMBE/EAMBES inspired action points to the attention of the European Commission. Accordingly, 3 letters have been prepared, in collaboration with the EAMBES and the IFMBE HTAD, and addressed to the key European Commissioners: Vytenis Andriukaitis, Health and Food Safety European Commission Department; Carlos Moedas, Research, Science and Innovation European Commission Department; Elżbieta Bieńkowska, Internal Market, Industry, Entrepreneurship and SMEs European Commission Department.

The EPIG on BME will meet again in November, to monitor the progress that the European Commission made and to identify new challenges.

Leandro Pecchia, IFMBE HTA Chairman.

-possible captions-



Picture 1: EPIG on BME launch. From left: prof Nicolas **Pallikarakis**, IFMBE HTAD past-Chair, Prof Richard A **Black**, University of Strathclyde and Editor-in-Chief of Medical Engineering & Physics IPEM Journal, John **Brennan**, Medtech Europe Director Regulations & Industrial Policy, Dario **Pirovano** Medtech Europe Senior Regulatory Adviser, prof Birgit **Glasmacher**, EAMBES Past President, Prof Heinrich **Schima**, EAMBES Fellow Chair, MP Nicola **Caputo**, European Parliament S&D, Prof Jary **Hyttinen**, EAMBES president, dr Leandro **Pecchia**, IFMBE HTAD Chairman and PAWG EAMBES Chairman, Prof Shankar **Krishnan**, IFMBE President-Elect, Prof Jos Vander **Sloten**, University of Leuven –Belgium, Prof Marc **Nyssen**, IFMBE Treasurer, Dr Adriana **Velazquez**, Director WHO Medical Device Unit, Dr Andrel **Linnenbank**, EMABES General Secretary, Prof Ratko **Majarevich**, IFMBE Past President.



Picture 2: attendees before entering the European Parliament (from left: prof Nicolas Pallikarakis, IFMBE HTAD past-Chair, prof Ratko Majarevich, IFMBE Past President, prof Jary Hyttinen, EAMBES president, prof Birgit Glasmacher, EAMBES Past President, Edgardo Iozia, European Economic and Social Committee, dr Andrei Linnenbank, EAMBES General Secretary, prof Heinrich Schima, EAMBES Fellow Chair, prof Shankar Krishnan, IFMBE Elected President, dr Leandro Pecchia, IFMBE HTAD Chairman and PAWG EAMBES Chairman, Adriana Velazquez, Director WHO Medical Device Unit).



Picture 3: EIP on BME preparation meeting, hosted at the University of Warwick Office in Brussels (from left: prof Birgit Glasmacher, EAMBES Past President, dr Leandro Pecchia, IFMBE HTAD Chairman and PAWG EAMBES Chairman, prof Ratko Majarevich, IFMBE Past President, Adriana Velazquez, Director WHO Medical Device Unit, Edgardo Iozia, European Economic and Social Committee, prof Shankar Krishnan, IFMBE Elected President, dr Andrel Linnenbank, EMABES General Secretary, prof Jary Hyttinen, EAMBES president, prof Heinrich Schima, EAMBES Fellow Chair, prof Nicolas Pallikarakis, IFMBE HTAD past-Chair).