SELECTION OF TWO PROFESSORS (LEVEL 1), FOR ACADEMIC RECRUITMENT FIELD 09/G2 "BIOENGINEERING" AT THE BIOROBOTICS INSTITUTE - ACADEMIC CLASS OF EXPERIMENTAL AND APPLIED SCIENCES, RESERVED, PURSUANT TO ART. 24, SUBSECTION 6, OF ITALIAN LAW 240/2010, FOR ASSOCIATE PROFESSORS EMPLOYED AT THE SCHOOL, ISSUED BY RECTOR DECREE. NO. 130 DATED 07/03/2024.

## MINUTES OF THE PRELIMINARY MEETING

The Review Committee for the selection of two professors (level 1) for the Academic Recruitment Field 09/G2 "Bioengineering" at the BioRobotics Institute of the Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna di Pisa (SSSA), reserved for associate professors employed at the SSSA to be selected pursuant to art. 24, subsection 6 of the Italian law 240/2010, nominated by decree No.347 dated 10/06/2024 by the Rector, that consists of:

- Prof. Silvia Farè, Full Professor of Academic Recruitment Field 09/G2 "Bioengineering" at Politecnico di Milano;
- Prof. Eugenio Guglielmelli, Full Professor of Academic Recruitment Field 09/G2 "Bioengineering" at the University "Campus Bio-Medico" of Roma, as expert designated by the BioRobotics Institute;
- Prof. Sami Haddadin, Full Professor at Technical University of Munich;
- Prof. Stèphanie P. Lacour, Full Professor at the Ecole Polytechnique Fèdèrale de Lausanne,
   as foreign expert designated by the Rector;
- Prof. George Malliaras, Full Professor at the University of Cambridge,

convened for the first time, via teleconference, on August 1, 2024, at 09:30 a.m.

https://polimi-it.zoom.us/j/92286331748?pwd=nzPmXYmUx5WRHotnk0qqvWHmKGFQFI.1

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from the following locations:

Prof. Farè located in Milan, connected via Zoom

Prof. Guglielmelli located in Rome, connected via Zoom

Prof. Haddadin located in Garmisch-Partenkirchen, Germany, connected via Zoom

Prof. Lacour located in Saint Gildas de Rhuys, France, connected via Zoom

Prof. Malliaras located in Kariani, Greece, connected via Zoom.

The text of the minutes that follows, was agreed on and approved by members of the Committee.

Prof. Guglielmelli was nominated as Chairperson and Prof. Farè as Secretary of the Committee. Pursuant to art. 5 paragraph 2 of Legislative Decree no. 1172/1948, all the members declared that they had no kinship or affinity up to the fourth grade with any of the other members and that there were no reasons for abstention in relation to art. 51 of c.p.c.

Committee then reviewed the call - (published on the SSSA website https://www.santannapisa.it/it/selezioni/selezione-la-copertura-di-due-posizioni-di-professoreessadi-prima-fascia-riservata) as well as Regulations of the School that regard calls for level 1 and level 2 professors (Arts. 18 and 24 of Law 240/2010- https://www.santannapisa.it/sites/default/files/2023-11/Regolamento%20per%20la%20disicplina%20della%20chiamata.pdf), and carried a motion that the committee's work should terminate by the 10th of October 2024 (four months from the date of the appointment decree). The Committee ascertained that SSSA Personnel Office communicated that four applications have been received.

The Committee agreed that the aim of the present meeting was to assess the criteria with which the publications, the curricula and teaching activities of the candidates will be evaluated and published on the SSSA website.

In accordance with Italian Ministerial Decree 344/2011, the following shall be assessed: educational activities, supplementary teaching and service to students, as well as the research activities carried out by the researcher.

The Committee will assess the researcher according to the parameters established by Ministerial Decree 344/2011, in relation to the compliance of the scientific profile with the "general criteria of qualification" for teaching and research required for access to didactic positions at the SSSA, and set out in Annex 1<sup>1</sup> to the call, established by the Committee for recruitment, according to the

Research Activity skills: the candidates must hold an outstanding ranking in their discipline in terms of quantity and quality of scientific publications; bibliometric criteria may be used if relevant for the scientific area.

Candidates must submit a document containing a self-assessment of their scientific productions in the international context. In this document they must explain their strength by comparison with the best-known colleagues' production and highlighting their relationships and their scientific reputation in the international research networks.

**Teaching Activity skills:** Having accumulated national and international teaching experience and having taught post-graduate courses and, in particular, in doctoral and PhD programmes and having achieved an student evaluation of teaching above-average of the evaluation of the teaching personeel of the Sant'Anna School will be an award of merit. Proven ability to supervise theses, in particular, doctoral and PhD theses, will also be a merit title.

Participation in research projects: candidates are required to have been involved in research projects funded through competitive calls e.g. European ERC grants, "Framework Programs" (eg, Networks of Excellence, FET, Integrated Projects, STReP, etc) Erasmus+Programe, Marie Curie actions, as well as national funding agencies. Ability in fundraising is welcome.

Teaching and Research qualification criteria, specifically requested by the Sant'Anna School:

## following general criteria:

- the scientific profile of the candidate with reference to the best national and international standards, and in particular as regards scientific production;
- organization, management and coordination of research groups and participation in national and international research projects;
- scientific collaboration with other universities, and with public and private organizations both
   in Italy and abroad;
- previous didactic activity including teaching in and coordinating training programs of highquality research at universities and colleges, with particular attention to experience abroad or in international contexts;
- institutional services, technology transfer activities and activities having societal impact (third mission), patent filing, contribution to standardization.

The Committee then establishes the criteria that it adopts for the evaluation of scientific publications, curriculum, and teaching experience of the candidates:

- 1. For the evaluation of teaching, supplementary teaching and service to students, the Committee will take account of:
  - a) number of courses and modules taught at national and international level, total number of hours\CFUs and continuity of teaching activities;
  - b) results of official feedback from students on the modules/courses taught;
  - c) coordination of teaching and/or training activities and participation in committees set up for the exams and/or committees on student progress/direction;
  - d) quantity and quality of seminars, regarding both tutorials and mentoring of students, including activities relating to the preparation of theses for Master's degree and PhD.

These aspects will be considered in relation to the academic age of the candidate (i.e., from the year of the first documented academic teaching activity).

2. Publications will be assessed along with texts accepted for publication in accordance with regulations as well as the essays included in collective works and articles published in journals in paper or digital format, with the exception of internal notes or departmental reports. The overall consistency of the scientific production of the researcher shall be assessed, the intensity and the temporal continuity of such production, with the exception of periods of involuntary removal from the

**Publishing activity**: the roles of editor and associate editor of scientific journals, editor of book series and other publishing activities or leadership roles in scientific associations hold by the candidates will be considered for the purpose of the selections.

research with particular reference to parental functions - such periods should be adequately documented.

The evaluation of scientific publications will be carried out on the basis of the following additional criteria:

- a) originality, innovation, methodological rigor and relevance of each publication;
- b) coherence of each publication with the specific profile of a university professor of the first level (full professor) with closely related interdisciplinary subjects;
- c) scientific relevance of each journal/publisher and its impact factor within the scientific community;
- d) analytical determination, on the basis of guidelines recognized by the relevant international scientific community of the individual contribution of the researcher in the case of works carried out in partnership.

Moreover, the Committee will also make use of bibliometric indicators including:

- 1) total number of citations;
- 2) number of citations per publication;
- 3) Hirsch index (or similar combined metrics),

with reference to the start date of the assessment.

These indicators will be drawn from Scopus and will be considered in relation to the academic age of the candidate (i.e., from the year of the first indexed publication). The Committee will consider and weigh the differences in these metrics for the different fields of the candidates and relevance to the position.

- 3. In the assessment of the scientific research, the Committee will take account of:
  - a) organization, leadership, coordination and participation with leading roles in national and international research groups;
  - b) scientific responsibility or coordination of research projects funded on competitive calls as European projects or other international or national and even regional competitive projects;
  - c) participation as invited speaker (e.g., keynote speech) in national and international conferences;
  - d) national and international awards for research activities;
  - e) role as editor or associate editor of journals in the field of bioengineering;
  - f) any ownership of patents, other relevant technology transfer achievements, e.g. promotion of spin-off companies, and other activities related to the third mission.

In order to check the continuity of the candidate's scientific production, the Committee will pay particular attention to the scientific output produced by the candidates after the date of expiry of the call under which they obtained eligibility ("Abilitazione").

The Committee decides to reconvene on August 9 2024 at 08:45 a.m. in order to review the name of candidates which will be sent by the Personnel Office after the publication of these minutes on the website.

At the end of the meeting, the Chairperson will sign the minutes and will send them to the Personnel Office who will then make public the criteria and procedures for the assessment of publications and qualifications.

The attached declarations of the Committee's members will be sent the Personnel Office too.

The meeting was adjourned at 10:15 a.m.

Read, approved and signed,

The Chairperson
Prof. Eugenio Guglielmelli

