PUBLIC SELECTION FOR ONE FULL PROFESSOR PURSUANT TO ART. 18, SUBSECTION 1, OF ITALIAN LAW 240/2010 IN THE ACADEMIC RECRUITMENT FIELD "AGRONOMY AND FIELD, VEGETABLE, ORNAMENTAL CROPPING" (07/B1 AGRONOMIA E SISTEMI COLTURALI ERBACEI ED ORTOFLORICOLI) – ACADEMIC DISCIPLINE "VEGETABLE AND ORNAMENTAL CROPS" (AGR/04 ORTICOLTURA E FLORICOLTURA) AT ACADEMIC FACULTY OF EXPERIMENTAL AND APPLIED SCIENCES - THE CROP SCIENCE RESEARCH CENTER, IUSSED BY RECTOR' DECREE NO. 524 OF JULY, 24, 2023, PUBLISHED ON THE SITE OF THE MINISTRY OF EDUCATION, UNIVERSITY AND RESEARCH ON JULY 25, 2023, NOTICE OF WHICH WAS PUBLISHED IN THE GAZZETTA UFFICIALE - 4° SERIE SPECIALE "CONCORSI ED ESAMI" NO. 58 DATED 01/08/2023.

### MINUTES OF THE THIRD MEETING

The Committee for the selection of one full professor in the Academic Recruitment Field "Agronomy and field, vegetable, ornamental cropping" (07/B1) - Academic Discipline AGR/04 "Vegetable and Ornamental Crops" at the Academic Faculty of Experimental and Applied Sciences - Crop Science Research Center, nominated by Rector' decree No. 654 dated 02/10/2023, that consists of:

- Prof. Stefania De Pascale, Full Professor of the Academic Recruitment Field 07/B1
   "Agronomy and field, vegetable, ornamental cropping" at the University of Napoli Federico
   II;
- Prof. Laura Ercoli, Full Professor of the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" at the School, designated expert by the Crop Science Research Center;
- Prof. Juan Antonio Fernandez Hernandez, Vegetable Crops Professor at the Technical University of Cartagena, Spain;
- Prof. Giorgio Prosdocimi Gianquinto, Full Professor of the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" at the University of Bologna;
- Dr. Cecilia Stanghellini, Senior Researcher at the Wageningen University, Netherlands; convened for the third time in Pisa on November 3, 2023 at 9.30 in the meeting room Aula 4 at the ground floor in the central building of the School, p.zza Martiri della Libertà, 33.

The members of the Committee states that the Personnel Office of the School has provided

them with an electronic copy of the documentation submitted by the applicant containing: application, curriculum, publications with a declaration in lieu of an affidavit certifying compliance with the original, letters of recommendation, and a list of all the documents accompanying the application.

The members of the Committee state that they have examined the publications, curriculum and teaching activities of the candidate and made their individual assessments, which are reported in Annex 1 of these minutes.

The Committee then examines the publications, curriculum and teaching activities of the candidate, confronts their individual assessments and reviews the collegiate assessments annexes sub 2 attached to the minutes of which they are an integral part.

After a wide and full discussion, on the basis of a unanimous vote, the Committee declares that the candidate Antonio Ferrante is highly qualified and eligible for the position of Full Professor - academic discipline Vegetable and Ornamental Crops (AGR/04 Orticoltura e Floricoltura) at the academic faculty of Experimental and Applied Sciences - the Crop Science Research Center.

The Committee then draws up a report summarizing the work carried out.

The session closed at 11.30.

Read, approved and signed.

The President

Prof. Giorgio Prosdocimi Gianquinto

The Secretary

Prof. Laura Ercoli

The Members of the Committee

Prof. Stefania De Pascale

Prof. Juan Fernandez

Dr. Cecilia Stanghellini

# ANNEX 1 – MINUTES OF THE SECOND MEETING INDIVIDUAL ASSESSMENT

# Prof. Giorgio Prosdocimi Gianquinto

**Teaching activities**: Antonio Ferrante has taught several courses belonging to the Academic Discipline "Horticultural and Ornamental Crops", SSD AGR/04. His teaching activity took place mainly at the University of Milano, but he also held some courses at the University of Modena and Reggio Emilia, the Free University of Bolzano and the Technical University of Cartagena. His teaching activities have been highly appreciated by students, as evidenced by course evaluation scores. He has supervised many master and PhD students (36 and 10, respectively).

Scientific publications: The level of the scientific production of Antonio Ferrante is very high, with a large number of articles published in leading journals in the field of horticultural sciences. Their quality is excellent, with works focused on biology and ecophysiology of vegetable and ornamentals crops, ranging from protected cultivation to vertical farming, both on substrate and in soilless culture. He is recognized, at both national and international level, as an excellent scientist in the field of horticulture. This is also clear from an analysis of his publication activity conducted on Scopus. The indicators highlight 218 papers included in the database, more than 5000 citations and h-index of 36. Antonio Ferrante's leading role in the 20 selected publications is evidenced by his position in the list of authors.

Curriculum: Antonio Ferrante is an outstanding scientist, well known in the international Horticultural Sciences community. He conducts research on innovative topics and also participates as a coordinator in very important international and national research projects. His scientific production is of the highest level and continuous over time.

Based on these considerations, I strongly recommend to enroll Antonio Ferrante as Full Professor at the Scuola Superiore Sant'Anna.

### Prof. Laura Ercoli

**Teaching activities**: Antonio Ferrante has taught, over the years, many relevant courses mainly at the University of Milano, but also at the Free University of Bolzano, at the University of Modena e Reggio Emilia and at the Technical University of Cartagena, both at the graduate and undergraduate levels. He is greatly appreciated by his students as demonstrated through the provided information on the course evaluation scores. His contribution on graduate student training is very strong as well, including supervision of 36 master students and 10 PhD students.

Scientific publications: Antonio Ferrante has an excellent publication track record in term of number, quality and editorial collocation of his scientific articles, mostly in the field of biology and ecophysiology

of vegetable and flower crops in protected cultivations, indoor, and in vertical farms, both on substrate and in soilless cultivation. His scientific production collocates him among the most prominent scientists in the field worldwide. The analysis of the publication activity through quantitative indicators shows an impressive profile, as 218 documents are included in Scopus database, with 5055 citations and h-index equal to 36. The prominent role of Antonio Ferrante in the 20 selected publications is evidenced by the position in the list of authors: he is first author in 5 publications, last author in 13 publications and corresponding author in 2 publication.

Curriculum: Antonio Ferrante is a well-established researcher, well connected and well-known in the international community of Vegetables and Floriculture Sciences due to the quality and quantity of research challenges addressed by his research group and to his strong capability to coordinate international and national research projects. Scientific production of Antonio Ferrante is far beyond what is requested to a Full Professor, as it is outstanding and continuous over time. Presented publications are innovative and relevant to the profile of the call.

Following my statements, I have no doubt to strongly encourage Scuola Superiore Sant'Anna to recruit Antonio Ferrante as Full Professor.

#### Prof. Stefania De Pascale

Curriculum: Antonio Ferrante is Full Professor of Vegetables and Floriculture Sciences at the University of Milano since January 1<sup>st</sup>, 2022. From 2016 to 2021 he has been Associate Professor, and from 2004 to 2016 Assistant Professor at the University of Milano. He obtained a B.S. and a M.S. at the University of Pisa and a *diploma* at Scuola Superiore Sant'Anna in Agricultural Sciences in 1997 (first-class honors). He also obtained a PhD at Scuola Superiore Sant'Anna in 2001 (first-class honors). Since he joined the University of Milan, he has performed numerous researches to determine the effects of environmental and cultural factors on plant growth and produce quality on a wide range of vegetable and flower crops in protected cultivation. Antonio Ferrante is an excellent researcher, very well connected and very well-known in the national and in the international community of horticultural science due to the quality and quantity of research challenges addressed by him and his research group. He has a strong capability to coordinate both national and international research projects. His scientific production collocates him among the most prominent scientists in the field of vegetable and ornamental crops production worldwide.

**Teaching activities**: Antonio Ferrante teaches in courses on Vegetable and ornamental crops production; Crop-physiology; Post-harvest physiology and Landscape horticulture and supervises BSc, MSc and PhD students. His contribution on graduate student training includes the supervision of 36 MSc students and 10 PhD students. He also teaches in national and international intensive courses on

4

topics related to vegetable and ornamental crops production. He is greatly appreciated by students as proved by his course evaluation scores.

Research activities: Antonio Ferrante has an excellent publication track record in term of number, quality and editorial collocation of his scientific papers, mostly in the field of biology and ecophysiology of vegetable and flower crops cultivation in greenhouse and in vertical farms, both on substrates and in hydroponics. The analysis of his publication activity through quantitative indicators shows an impressive profile, as 218 documents are included in Scopus database, with 5055 citations and h-index equal to 36. Presented publications are innovative and relevant to the profile of the call. The prominent role of Antonio Ferrante in the 20 selected publications is evidenced by his position in the list of authors (first author in 5 publications, last author in 13 publications and corresponding author in 2 publications). Antonio Ferrante's scientific production is outstanding and continuous over time and far beyond what is requested to a Full Professor.

Overall, I strongly encourage Scuola Superiore Sant'Anna to recruit Antonio Ferrante as Full Professor.

# Prof. Juan Fernandez

**Teaching activities**: Antonio Ferrante has taught many relevant courses at the graduate and undergraduate levels both at Italian universities (the University of Milano, the Free University of Bolzano and the University of Modena e Reggio Emilia) and at the Technical University of Cartagena (Spain). He gets very good teaching evaluations from his students just as the information on the course evaluation scores points. In addition, he has supervised 36 master students and 10 PhD students.

Scientific publications: Antonio Ferrante has an excellent publishing history in terms of number and quality of his scientific articles, mainly in the field of biology and ecophysiology of vegetables and ornamental crops grown in protected crops, indoors and in vertical farms. His scientific production collocates him among the most prominent scientists in this field worldwide. The analysis of his publication activity shows an impressive profile, since 218 documents are included in Scopus database. In addition, he exhibits a h-index equal to 36 with 5055 citations. Finally, the outstanding role of Antonio Ferrante in the 20 selected publications is evidenced by the position in the list of authors: he is first author in 5 publications, last author in 13 publications and corresponding author in 2 publications.

Curriculum: Antonio Ferrante is a well-known and well-connected researcher in the international Vegetable and Floricultural Sciences community due to the quality of his investigation. In addition, he is a well-connected researcher since he has an excellent national and international research network and coordinates numerous research projects international and national. His scientific production goes far beyond what is required of a Full Professor, since it is outstanding and continuous over time. The publications presented are innovative and relevant to the profile of the call.

In my opinion, he fully deserves to be enrolled by Sant'Anna as a Full Professor.

## Dr Cecilia Stanghellini

**Teaching activities**: Prof Antonio Ferrante has taught various topics (relevant to the present position) in several universities (besides his home University of Milan) both at the graduate and undergraduate levels. That he is a good teacher is shown by the course evaluation scores. He has successfully supervised an impressive 36 master and 10 PhD thesis.

Scientific publications: Antonio Ferrante has an excellent publication track record that ranks him very high also at the international level. Horticulture is the common field, and the specific themes show his broad interest and expertise: biology and ecophysiology of vegetable and flower crops in protected cultivations, indoor, and in vertical farms, both on substrate and in soilless cultivation. The metrics are impressive: h-index 36; 218 Scopus documents and 5055 citations. The specifics about author contribution to the most cited papers make clear his prominent role in all of them. In short one could say that Prof. Ferrante has contributed to forming a quite active group of young scientists.

**Curriculum**: Altogether, Prof Antonio Ferrante is a well-established researcher, well connected and well-known in the international community of Vegetables and Floriculture Sciences. He is also a very effective educator, as shown by the quality and quantity of research challenges addressed by his research group. His ability to attract funding and lead projects both at international and national level is an asset for his University and his group.

As all of the above makes clear, I strongly recommend Scuola Superiore Sant'Anna to recruit Antonio Ferrante as Full Professor.

6

# ANNEX 2 – MINUTES OF THE SECOND MEETING COLLEGIAL ASSESMENT

In accordance with the Italian Ministerial Decree 344/2011 and with the criteria agreed upon by the evaluation committee at the preliminary meeting, the following criteria have been taken into consideration:

- 1) Teaching activity
- 2) Scientific publications
- 3) Curriculum.

**Teaching activity**: Prof Antonio Ferrante has taught various topics (relevant to the present position) in several national (besides his home University of Milan) and international universities both at the graduate and undergraduate levels. That he is a very good teacher is shown by the high course evaluation scores. He has successfully supervised an impressive 36 master and 10 PhD thesis.

Scientific publications: Antonio Ferrante has an excellent publishing history in terms of number and quality of his scientific articles, mainly in the field of biology and ecophysiology of vegetables and ornamental crops grown in protected cultivation, greenhouse and vertical farm. His scientific production collocates him among the most prominent scientists in this field worldwide. The analysis of his publication activity shows an impressive profile, since 218 documents are included in the Scopus database. In addition, he exhibits a h-index equal to 36 with 5055 citations. Finally, the outstanding role of Antonio Ferrante in the 20 selected publications is evidenced by the position in the list of authors: he is first author in 5 publications, last author in 13 publications and corresponding author in 2 publications.

Curriculum: Antonio Ferrante is Full Professor of Vegetables and Floriculture Sciences at the University of Milano since January 1<sup>st</sup>, 2022. From 2016 to 2021 he has been Associate Professor, and from 2004 to 2016 Assistant Professor at the University of Milano. He obtained a B.S. and M.S. at the University of Pisa and a *diploma* at Scuola Superiore Sant'Anna in Agricultural Sciences in 1997 (first-class honors). He also obtained a PhD at Scuola Superiore Sant'Anna in 2001 (first-class honors). Antonio Ferrante is an outstanding scientist, well known in the international Horticultural Science community. He and his group conduct research on innovative topics; his ability to attract funding and lead projects, both at international and national level, is an asset for his University. His scientific production is of the highest level and continuous over time.