

SELECTION OF ONE ASSOCIATE PROFESSOR FOR THE ACADEMIC RECRUITMENT FIELD 05/A2 "PLANT PHYSIOLOGY" AT THE INSTITUTE OF LIFE SCIENCES - ACADEMIC CLASS OF EXPERIMENTAL AND APPLIED SCIENCES, PURSUANT TO ART. 24, SUBSECTION 5, OF ITALIAN LAW 240/2010, ISSUED BY RECTOR DECREE NO. 341 DATED 15/06/2017.

The Committee for the evaluation of Dr. Chiara Pucciariello, tenure-track – probationary, assistant professor, in third year of her temporary contract pursuant to Italian Law no. 240/2010, art. 24 paragraph 3 letter B, in order to promote her to Associate Professor in the Academic Recruitment Field 05/A2 "Plant Physiology" at the Institute of Life Sciences, nominated by decree No. 496 dated 15/09/2017 by the Rector, consists of:

- Prof. Cecilia Laschi, Professor of Bioengineering at the Scuola Superiore Sant'Anna (School), member of the Recruitment Committee;
- Prof. Paolo Bernardo Trost, Professor of Plant Physiology at the University of Bologna, designated expert by the Institute of Life Sciences;
- Prof. A.C.J. (Laurentius) Voesenek, Professor of Plant Ecophysiology at the University of Utrecht;
- Prof. Joost Van Dongen, Professor of Molecular Ecology at RWTH Aachen University
- Prof. Fiorella Lo Schiavo, Professor of Plant Physiology at the University of Padova;
- Prof. Laura De Gara, Professor of Plant Physiology at the Campus Biomedico – Rome.

The Committee convened on October 26, 2017, at 4.00 pm, in teleconference, from the following locations:

Prof. Paolo Bernardo Trost, located in Bologna, connected via Skype: paolo.trost

Prof. Fiorella Lo Schiavo, located in Padova, connected via Skype: fiorellaloschiavo

Prof. Joost Van Dongen, located in Aachen, Germany, connected via Skype: joostvandongen

Prof. A.C.J. (Laurentius) Voesenek, located in Utrecht, The Netherlands, connected via Skype: rensvoesenek

Prof. Laura De Gara, located in Rome, connected via Skype: laura.degara

Prof. Cecilia Laschi, located in Pontedera (Pisa), connected via Skype: laschisan

The minutes that follows were agreed on and approved by the members of the Committee.

Pursuant to art. 5 paragraph 2 of Legislative Decree no. 1172/1948, each member declared that they have no kinship or affinity up to the fourth grade with any of the other members and the candidate, that there are no reasons for abstention in relation to art. 51 of c.p.c. and that he is not in any situation, actual or potential, of conflict of interests with the candidate (as per art. 6 bis of the Legislative Decree No 241/1990).

Prof. Trost was nominated as President and Prof. Laschi as Secretary.



The Committee then reviewed the Call and especially his article 4 and agreed that the candidate shall be assessed 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 professoral positions at the School" established by the School's Commission for Recruitment and set out in article 1 of the Call.

The members of the Committee stated that the Personnel Office of the School has provided them with an electronic copy of the documentation submitted by the candidate containing: application, curriculum, publications with a declaration in lieu of an affidavit certifying compliance with the original, and a list of all the documents accompanying the application and that they have examined it and made their individual assessments, which are reported in Annex 1 of these minutes.

The Committee then collectively examined the publications, curriculum and teaching activities of the candidate, confronted their individual assessments and reviewed the collegiate assessment annex 7 attached to the minutes of which it is an integral part.

Then, after a full discussion, the Committee unanimously declared that Dr. Chiara Pucciariello:

is qualified to be appointed as associate professor.

Prof. Cecilia Laschi (Member of the Recruitment Committee) testified that the evaluation of the candidate, the presentation of the individual assessments, the ensuing discussion and, in general, the whole procedure occurred in full compliance with the rules established by Scuola Sant'Anna and its recruitment committee.

Given the conclusion of the selection procedure for a position of associate professor, at the Institute of Life Sciences in the Academic Class of Experimental and Applied Sciences, for the Academic Recruitment Field 05/A2 "Plant Physiology", pursuant to art. 24, subsection 5 of Italian law 240/2010, the President declared the work closed.

These minutes, drawn up and signed by the President, and the attached declarations of the Committee members will be sent the Personnel Office in order for these proceedings to be verified, with a decree by the Rector.

The session closed at 5 pm.

Read, approved and signed,

The President

A handwritten signature in blue ink, appearing to read "Paolo Benvenuti", is written over a horizontal line.

ANNEX 1

Assessment by Prof. Paolo Bernardo Trost

Teaching. During the 3-years contract as Assistant Professor, the candidate has carried on two short courses of 10 hours each for PhD students at SSSA; participated to several committees for the selection of undergraduate and PhD students in Plant physiology; served as a tutor for undergraduate students (1), PhD students (1 thesis; 2, ongoing). Overall, the teaching activity is considered sufficient.

Publications. The candidate presented 12 publications from 2006 to 2017, with good temporal continuity. In 10 among 12 papers she's either first or last or corresponding author. The 12-publications list includes 2 reviews on excellent journals. Based on the impact factor, the journals hosting Chiara Pucciariello's papers are all ranked in the first quartile (Q1) of the ISI subject category Plant Science. The publication list speaks in favor of a solid scientific reputation. Based also on the bibliometric parameters, I consider excellent the overall scientific production of Chiara Pucciariello.

Scientific research. Chiara Pucciariello worked in five different labs during her career and spent long periods abroad (Munich, Sophia-Antipolis, Gent). Her ability to publish very good papers in every lab she visited is remarkable. She's very well known and recognized in the field of hypoxic responses in plants and I consider outstanding, overall, her scientific activity.



ANNEX 2

Assessment by Prof. A.C.J. (Laurentius) Voesenek

Dr. C. Pucciariello is active in the field of low oxygen research. This fundamental research is linked to flooding stress as this is often accompanied with low oxygen conditions inside plant cells. Related to her career phase Dr. Pucciariello has a reasonable H-factor that to my expectation will significantly increase in coming years. I am impressed by the consistent quality of the publications. The journals are of high to very high quality and the work is frequently cited. Dr. Pucciariello is visible in the flooding research field due to the high quality of her work and her excellent communication skills. It is my expectation that she will play an important role in this community, also in the future.



ANNEX 3

Assessment by Prof. Dr. Joost T. van Dongen

It is with great pleasure that I provide here my assessment of Dr. Chiara Pucciariello for the tenure track promotion to Associate Professor at the Institute of Life Sciences at the Scuola Superiore Sant'Anna (SSSA). I know Dr. Pucciariello for about 10 years now. I met her personally during several visits to her laboratory, as well as on meetings and conferences, and I follow her scientific work via the papers that she publishes. Following the guideline for evaluation, I comment on the following topics:

1. Teaching

Dr. Pucciariello performed teaching duties that an assistant professor at a similar stage of career at SSSA is usually involved in. She provided regular PhD-classes, supervised undergraduate and PhD-students in the laboratory, and gave several scientific colloquia at other universities. Altogether, during the past years, Dr. Pucciariello collected the experience in academic teaching that is required to be prepared for future teaching duties at the university.

2. Publications

Already starting with her PhD research, Dr. Pucciariello produced a continuous track record of scientific publication in good to excellent journals. Throughout the years, she published a coherent scientific output that clearly marks her scientific niche within the academic community. Many of the journals (e.g. plant physiology, plant journal, nature plants) belong to the absolute top-ranked journals in her research field. A significant amount of this work is published with Dr. Pucciariello as first author. Recently, she also started to publish as corresponding author, clearly indicating how Dr. Pucciariello is growing and developing as an independent scientist. Not only did she publish original research data, Dr. Pucciariello also contributed to the scientific discussion with several review and opinion papers. Her work is very well recognised by the scientific community that is interested in the physiology and molecular biology of plant (a)biotic stress responses, which also becomes clear from her high citation scores (approx. 80 to 90 citations per year, since 2013) and the h-index that she has.

Altogether, I recognise the scientific output of Dr. Pucciariello as truly excellent and absolutely relevant for the development of her research field.

3. Scientific research

Dr. Pucciariello is a very broad plant physiologist with expertise in both biotic and abiotic stress responses of plants. She has a strong background in plant molecular biology, and general plant physiology. Her research is timely and original, and the methods that are used are state of the art. Throughout her career, she worked in different laboratories and in various countries, which also contributes strongly to her personal development as an independent scientist. Furthermore, her scientific expertise can be recognised through the presentations that she was invited to give at international conferences. Moreover, she is regularly asked to provide her scientific assessment as reviewer for different scientific journals, indicating that Dr. Pucciariello is an esteemed scientist whose opinion is happily requested to evaluate the quality of manuscripts and experiments from others.

Taken together, I do not hesitate to recommend Dr. Chiara Pucciariello to be appointed as associate professor at SSSA.



ANNEX 4

Assessment by prof. Fiorella Lo Schiavo

Chiara Pucciarello meets all the criteria required for access to a position of associate professor in the field of Plant Physiology at the Institute of Life Sciences in the Academic Class of Experimental and Applied Sciences.

She presented 12 publications to be evaluated. All of them belong to the first quartile of the plant science journal list and are coherent with the plant physiology discipline. Half of them are of very high impact in the field. In 9 of them she appears as a prominent author (first, co-first, last name).

As teaching activities and service to the students, she has taught two courses and was involved in different activities as member of many committees, providing seminars to PhD students, together with lab tutorials, being a mentor to several students, and supervising a PhD thesis.

Considering the organisation, management and coordination of scientific research, she has been responsible for an international programme in collaboration with French partners. Moreover, as recipient of a DAAD fellowship, she participates in an international research group together with the Plant Biochemistry and Molecular Biology group of Aachen University (Germany).

In conclusion, the overall judgment on the candidate can be considered more than sufficient for her teaching activities and excellent for the scientific research activities.



ANNEX 5

Assessment by prof. Laura de Gara

1. Teaching

- a) The candidate reports occasional teaching activities in 2015 and 2016, in the years 2016 and 17 she was in charge for a course to PhD students at SSSA (1CFU each year).
- b) No information on official students' feedback have been reported.
- c) The candidate has a good experience in exam participation and student selections in her Institution and abroad.
- d) She participated to PhD scientific formation both giving seminars and being mentor of 2 PhD students, 1 bachelor students and several high school students.

In the overall, the teaching activity is sufficient.

2. Publications

The candidate has published a good number of publications coherent with the SSD of the present selection and with a very good impact in the scientific community. The research activity of the candidate is continuous, despite of the two maternity leaves that she reports.

- a) The publication presented by the candidate are of excellent quality in terms of originality, methodological rigor and innovation. Several of the 12 publication were published in excellent Journals (*Nature Plants, Plant Journal, Plant Physiology*) but all the presented publications are very good.
- b) According to the position of the candidate among the authors and the coherence of the studied issues, the publications are coherent with the specific profile of a second level univeristy professor.
- c) The whole record of publications is of very good standard.
- d) The candidate's contribution is significant and clear, the candidates has prominent position among the authors in 10 papers out 12 presented for this evaluation. Her contribution in the other publication present in her cv is also evident.
- e) The candidate reports an h-index of 14, with 648 total citations. At present the 27 publication present in scopus have received 683 citations. This represent a very good standard for a young researcher in plant science field.

The scientific production of the candidate in terms of publications is excellent.

3. Scientific research

The candidate has good experience in plant physiology, in particular in the last 10 year her research interest has been focused on ROS/O₂ signalling and sensing. She reports several activities as visiting



researcher in different research institutions in Italy or abroad. It is worth noting that in the different research groups where she worked, her contribution to the research was always clear and relevant.

a) The candidate participated to several research projects. She also was PI in one small project (Programme PHC Galilée). She covered managing activities as person in charge of tasks as technical or security manager for laboratory best practices.

b) She participated to different congresses and workshops; in 4 cases presenting oral communications (two in international congresses and two in national ones).

c) The candidate had a Marie Curie Grant and two scholarships.

d) She do not report patents.

The candidate has activities as evaluators for scientific prizes and reviewer for different ISI journal of relevance in plant science.

Overall, the scientific activity of the candidate in terms of publications is very good.

A handwritten signature in blue ink, consisting of stylized, overlapping letters that appear to be 'M' and 'S'.

ANNEX 6

Assessment by Prof. Cecilia Laschi

1. Teaching

The candidate has carried on 2 courses for PhD students at SSSA, in 2016 and 2017, and 3 exercitation activities in 2015 and 2016.

The candidate has a rich experience of participation in committees for the selection of scholars, undergraduate students and PhD students, including the participation in a committee abroad.

She gave 3 seminars at SSSA and other universities, as part of initiatives for PhD students. She has been tutoring 1 undergraduate student at SSSA and 2 PhDs, as well as 2 high school students in the framework of initiatives with schools. She has been the supervisor of 1 PhD Thesis at SSSA.

The overall teaching activities is not extremely rich, but it is quite in line with the activities of an assistant professor of similar seniority at SSSA.

2. Publications

The candidate has a consistent production of publications. She shows a good continuity of publication activities, from the papers published on her PhD work, through the publications of her Post-Doc period, to the papers published in her current position of Assistant Professor at SSSA, despite of the two maternity leaves that she reports. She outlines very clearly the continuity of her research activity, in terms of topics and scientific questions addressed.

The journals in which the candidate publishes are all highly relevant and their impact factors are generally high, up to the very high ones of *Trends in Plant Science*, *Nature Plants*, *Plant Physiology*, *Plant Journal*.

Her personal contribution is significant and it is quite clear, from the position of her name in the authorship and from other explanations given.

The candidate reports an h-index of 14, with 648 total citations. She compares very well with awarded early-career researchers in her field. An up-to-date search on Scopus gives 27 products, with 683 citations (more than 25 citations per paper) and an h-index of 15 (as per 25/10/2017).

Overall, the scientific production of the candidate in terms of publications is outstanding.

3. Scientific research

The candidate shows a solid expertise in different areas of plant physiology, a strong attitude to research, a rich experience of research activities in different research institutes, in Italy and abroad.

She participated in different research groups, in the different institutions where she worked. She has experience of collaborative research in international consortia. She has served as responsible person for a



project. She has been providing support to the research activities in her lab as technical manager and safety manager.

She gave talks and seminars at different scientific events, in Italy and abroad. She has contributions in international conferences.

The candidate is the recipient of a Marie Curie Grant and two scholarships.

The candidate also served as evaluators for scientific prizes. She has been doing editorial activities as a reviewers for many journals in her field.

Overall, the scientific activity of the candidate in terms of publications is outstanding.

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ANNEX 7

Collegiate assessment

Teaching

The teaching activity of the candidate is more than sufficient for her career level. The overall teaching activities is not extremely rich in quantity, but it is quite in line with the activities of an assistant professor of similar seniority at SSSA.

Publications

The candidate's scientific production in terms of publications is impressive, not only for their quantity but also for their quality. Her papers are published in journals that are recognised as top ones by her scientific community. The candidate's papers are widely cited, showing the importance of their contribution.

The candidate demonstrates a good continuity of publication activities, despite of her maternity leaves and despite the fact that she moved to several labs along her career. Keeping this continuity of publication is remarkable.

The originality, the innovation, the methodological rigor and the relevance of each publication are undisputed for all members of the committee. They are fully coherent with the profile of associate professor of this selection.

The bibliometric indicators presented by the candidate are excellent. They show a strategy based on publications in top journals, addressing quality more than quantity, which is commended by the committee.

Overall, the scientific production of the candidate in terms of publications is excellent.

Research

The candidate's scientific research is outstanding.

She worked in different research groups during her career and in all groups she contributed significantly, as demonstrated by the related publications.

In her community she is very visible and she is considered as the expert, in her specific field. This is due to her personality, but especially by the high quality of her work. She is an esteemed scientist and she is invited regularly to serve as a referee.

