



DELIBERA

Organo	COMITATO PER IL RECLUTAMENTO E LO SVILUPPO DELLE CARRIERE
Data seduta	25 settembre 2018
Sede	Via Calepina 14, Trento – riunione telematica
Oggetto	<b>Valutazione di ricercatore di cui all'art. 24, comma 3, lett. b), L. 240/2010 ai fini della chiamata nel ruolo di professore associato: dott. Emiliano BIASINI, Centro di Biologia Integrata.</b>

**Sono presenti alla deliberazione:**

VALENTINA NIDER	Presidente	P
ALBERTO BELLIN	Componente	P
YURI BOZZI	Componente con funzioni di segretario	P
LUCA NOGLER	Componente	P
RAUL PAOLO SERAPIONI	Componente	P

Visto lo Statuto dell'Università degli Studi di Trento emanato con D.R. 167 del 23.04.2012;

Vista la legge 30 dicembre 2010 n. 240 "Norme in materia di organizzazione delle Università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l'efficienza del sistema universitario" e in particolare l'art. 24, comma 5;

Visto il Regolamento per il Reclutamento e la progressione di carriera di professori e ricercatori, emanato con D.R. n. 563 del 29 ottobre 2013 e in particolare l'art. 32 "Valutazione dei titolari dei contratti di cui all'art. 20, comma 1, lettera b) del presente Regolamento ai fini della chiamata nel ruolo di professore associato";

Visti i "Criteri per la valutazione dei ricercatori a tempo indeterminato con contratto di cui al comma 3, lettera b), dell'art. 24 della Legge 240/2010, ai fini della chiamata nel ruolo di professore associato", approvati dal Comitato per il Reclutamento e lo Sviluppo delle Carriere nella seduta del 21 luglio 2015;

Vista la delibera del Consiglio del Centro di Biologia Integrata del 19 marzo 2018, con la quale si esprime parere favorevole all'inquadramento del dott. **Emiliano BIASINI** nel ruolo di professore associato per il settore concorsuale 05/E1 (Biochimica generale e biochimica clinica), settore scientifico disciplinare BIO/10 (Biochimica);

Vista la propria delibera del 8 giugno 2018, con la quale sono stati individuati i referee esterni chiamati a valutare la maturità scientifica e didattica del dott. **Emiliano BIASINI** nel ruolo di professore associato per il settore concorsuale 05/E1 (Biochimica generale e biochimica clinica), settore scientifico disciplinare BIO/10 (Biochimica);

Vista la propria delibera del 11 settembre 2018, con la quale sono stati individuati ulteriori referee esterni chiamati a valutare la maturità scientifica e didattica del dott. **Emiliano BIASINI**, in aggiunta agli esperti già nominati nella seduta del 8 giugno 2018;

Viste le valutazioni espresse dai tre referee sul profilo del dott. **Emiliano BIASINI**, di cui sono riportati di seguito alcuni estratti:

Referee 1:

*Evaluation report for Emiliano Biasini, candidate for the position of Associate Professor at the end of his three-year tenure-track position as ricercatore a tempo determinato "tipo B" at the Centre for Integrative Biology of the University of Trento.*

*Dr. Emiliano Biasini reports a continue, technically meticulous, and exciting scientific production with a good impact in the fields of fundamental and applied Biochemistry. In particular, Dr. Emiliano Biasini is co-author of 40 articles and review in Peer Review Journals, 1 book chapter, and 1 patent; in 19 article, he is the principal investigator or the corresponding author.*

*Dr. Emiliano Biasini spent seven years in US institutions covering the positions of postdoctorate (Washington University in St. Louis; 2005-2007), Instructor (Boston University, School of Medicine; 2010-2013), Adjunct Instructor (Boston University, School of Medicine; 2013-2016).*

*Moreover, he spent four years at the Mario Negri Institute for Pharmaceutical Research (2007-2009) as Research Associate and was Group Leader at the Italian Institute of Health, Roma (2014-2016).*

*Dr. Emiliano Biasini came back to Italy in 2015, covering the position of Assistant Professor at Dulbecco Telethon Laboratory of Prions & Amyloids, CIBIO, University of Trento.*

*Dr. Emiliano Biasini's work is principally focused on neurodegenerative diseases with particular attention for the prion diseases, including the transmissible bovine spongiform encephalopathy (also known as the mad cow disease). The research of Dr. Emiliano Biasini has been funded from competitive National and European grants. The role of Dr. Emiliano Biasini as first/last author proves his preeminent contribution to*



the research performed (19 over 40 papers).

From the teaching viewpoint, Dr. Biasini has trained students in basic and advanced Biochemistry. At present, he teaches Biochemistry in the Master in Quantitative and Computational Biology.

During last three years of his career, the candidate has been very active as demonstrated from the peer-reviewed-publications, the participation to international meetings and for having received grants.

As a whole, the scientific and teaching curricula of Dr. Emiliano Biasini demonstrate that the candidate possesses a scientific autonomy and maturity, which is widely recognized by the scientific community inviting him to present the results of his work at international conferences.

In my opinion, Emiliano Biasini is truly deserving this position, and I wish his success in this endeavor.

**Referee 2:**

I have a long dated experience in prion disorders. Thus, I have the background to make an independent evaluation of Dr Emiliano Biasini qualification as high profile researcher.

I should state that I have been acquainted with Dr Biasini work since 2005 on his different projects focused on basic molecular mechanisms of human and animal prion disorders as well as on other proteins involved in neurodegenerative diseases propagating as prion-like and It's my great pleasure to write a letter in support of Dr Biasini. He is a skillful and gifted researcher who always gives his important contribution in discussion at International conferences and private meetings with outstanding original ideas. This is the result of his cultural background because he is a biologist with pharmacology background but he also has an extensive knowledge in neuropathology, biochemistry, molecular biology and cell biology.

He has opened novel and original focus on the targeting prion protein as a primary target molecule involved in human prion disorders. He has set up novel screening methodologies for Creutzfeldt-Jakob disease treatment. For this reason, this procedure is going to be applied for novel drug discovery platforms. In other words, he made exceptional contributions in the field of neurodegeneration, especially with regards to the propagation of prions and in particular, on the targeting of prion protein and its mechanism of prion conversion.

Dr Biasini is an outstanding lecturer and I am sure his involvement in the teaching program of his Institution has made him valuable for new generations of young researchers.

I have no reservations to recommend Dr Biasini for an associate professor position and I support this application most enthusiastically.

**Referee 3:**

I understand that the University of Trento is considering Dr. Emiliano Biasini for promotion to the rank of Associate Professor. It is my pleasure to give him my strongest recommendation.

**Overall judgment**

Dr. Biasini is an internationally recognized scientist in prion research who has made impressive contributions to our field over the last 16 years. His CV demonstrates an excellent combination of exciting research outputs, internal and external management and leadership skills and successful teaching. I expect Dr. Biasini to continue to advance substantially the scientific knowledge of our discipline. The originality and quality of Dr. Biasini's scientific achievements are impressive and prove him as a productive scientist highly qualified for promotion to the rank of Associate Professor at the Centre for Integrative Biology of the University of Trento.

**Judgment of Research Contribution**

Dr. Biasini studied at the University of RomaTre and specialized in Pharmacological Research and Applied Genetics at the Mario Negri Institute of Pharmacological Research (Milan) and the University of La Sapienza (Rome), respectively. From 2005-2007, he joined Dr. David Harris in St. Louis, USA, as a postdoctoral fellow. In 2007, he returned as Research Associate to the Mario Negri Institute. From 2010-2013, Dr. Biasini served as Instructor at the Boston University School of Medicine, USA. Dr. Biasini accepted a position as Group Leader at the National Institute of Health, Rome, c/o Department of Neuroscience, Mario Negri Institute for Pharmacological Research, in 2014. In 2015, Dr. Biasini received the prestigious Career Developing Grant of the Telethon Foundation and was appointed Assistant Professor at the Centre for Integrative Biology at the University of Trento.

Dr. Biasini started his research on prions at the Mario Negri Institute and has since then become an internationally recognized expert in prion biology. I have met Dr. Biasini on many occasions at scientific conferences and have followed with great interest his scientific contributions to the field. Dr. Biasini has a strong research record with an impressive number of original research articles in important scientific journals. Since 2003, he has authored or co-authored a total of 33 peer-reviewed research articles (13 as first or corresponding author), one book chapter and seven review articles. Since his promotion to Assistant Professor in 2015, he has published four research articles as corresponding author and co-authored five peerreviewed research studies.

His major research interest is to find novel ways for therapeutic intervention for prion and related neurodegenerative diseases. His focus on developing anti-prion compounds and the implementation of advanced cellular systems to study prion toxicity have direct relevance for public health. Specifically, his team focuses on cellular PrP (PrP<sup>c</sup>) as a potential drug target in neurodegenerative diseases. While PrP<sup>c</sup> serves as the substrate for the formation of abnormally folded infectious prions, evidence accumulates that



*PrPc is also involved in neurotoxicity in other neurodegenerative diseases.*

*Binding of oligomers composed of amyloidogenic proteins to PrPc has been shown to elicit neurotoxic signaling. However, how exactly this is happening is unclear. Understanding the mechanism of neurotoxic signaling through PrPc is thus of utmost importance to develop novel avenues for disease intervention. Dr. Biasini does so by using novel cellular models that enable him to study both PrP conversion and neurotoxic signaling through PrPc or through related family members of PrP, such as Shadoo. His approach is three-fold: 1) To understand the molecular mechanisms of physiological and pathological signaling through PrP and 2) to study in detail the cellular mode of action of anti-prion compounds to reveal avenues to intervene with prion formation and 3) to use knowledge from these studies to screen for and design novel anti-prion and anti-PrP mediated toxicity compounds. His recent publications reflect the success he has made following this approach.*

*In a collaboration with Dr. Malaga-Trillo, he unraveled a PrP-dependent signaling pathway involved in  $\beta$ -catenin adhesion. As this pathway in the zebrafish is also sensitive to  $A\beta$  oligomers that form during Alzheimer's disease, this model system can provide a platform rapid testing of compounds active against prions and neurodegenerative disease-linked proteins (Sempou et al., Mol Neurodegen 2016). His team also recently demonstrated that the PrP family member Shadoo possesses channel activity similar to pathogenic PrP mutants, suggesting that this activity is of physiological relevance to Shadoo (Nyeste et al., Sci Rep 2016). By studying in detail the mode of action of a known anti-prion compound, chlorpromazine, he was able to redefine the mechanism of its anti-prion activity, demonstrating that dynamin GTP-ase activity and PrPc recycling are crucially involved in prion formation (Stincardini et al., PlosOne, 2017). In a study published in Scientific Reports, Dr. Biasini and his team investigated the mode of action of the anti-prion compound Fe(III)-TMPyP (Massignan et al., Sci Rep 2016). Interestingly, they discovered that drugs that bind the cellular form of PrP can not only inhibit propagation of multiple prion stains in vitro and in cellula, but that PrP-binding compounds can also decrease PrPc-mediated toxicity. This is of particular importance, as PrPc has been shown to elicit toxic signaling by oligomers formed by amyloidogenic proteins associated with Alzheimer's and Parkinson's disease. These data suggest that targeting PrPc could be a promising approach for therapeutic intervention in a number of neurodegenerative diseases. In summary, Dr. Biasini's research has substantially contributed to the understanding of pathologic PrP conversion and PrP-mediated signaling. The methods and models he has implemented in his lab put him in the perfect position to screen for compounds that interfere with these pathways. I expect Dr. Biasini to use his technologies to his best advantage and to continue to produce high quality data that advance our understanding and to contribute to finding avenues of disease intervention.*

*Dr. Biasini's research has not gone unnoticed in the community. Regularly, Dr. Biasini has been invited to present his research at national and international conferences. Dr. Biasini very successfully collaborates with important scientists in the fields of pharmacology and protein misfolding. Collaboration partners include Dr. Provenzani (Manzoni et al., J Med Chem 2018), Dr. Gobbi (Stravalaci et al., J Alz Dis 2017) and, Dr. Malaga-Trillo (Sempou et al., Mol Neurodegen 2016), to name a few. Dr. Biasini has served as ad hoc reviewer for prestigious journals such as Nature Rev Genetics, Nature Biomed Engineering, J Neurosci and acted as reviewer for funding bodies. He successfully secured several research grants, including the prestigious Young Investigator Award from the Italian Ministry of Health (2013-2016) and the Career Developing Award from the Telethon Foundation (2015-2020). Dr. Biasini was also awarded funding by international foundations, such as the MS Society Pilot Grant and a CJD Research Grant in 2016 and 2015, respectively. He is also co-founder and scientific advisor of Sybilla Biotech SRL (www.sybillabiotech.it).*

#### **Judgment of Teaching Contribution**

*Dr. Biasini has substantial experience as a lecturer. Since 2016, he teaches Biochemistry and Applied Biochemistry for Master and Bachelor students at the University of Trento. In 2012-2013, Dr. Biasini held courses in Techniques in Biochemistry, Cell and Molecular Biology as well as Biochemistry and Molecular Biology in Boston.*

*In conclusion, the impressive contributions Dr. Biasini has made to research and his strong leadership skills make him a great candidate for promotion to the position of Associate Professor at the University of Trento.*

Visto il curriculum vitae del dott. **Emiliano BIASINI**;

Con voto unanime;

Delibera

1. di formulare la seguente valutazione del dott. **Emiliano BIASINI**, ai fini della chiamata ai sensi dell'art. 24 comma 5, L. 240/2010 nel ruolo di professore associato per il settore concorsuale 05/E1 (Biochimica generale e biochimica clinica), settore scientifico disciplinare BIO/10 (Biochimica):

*I giudizi espressi dai referee esterni sul contributo scientifico, la qualità dell'attività di ricerca e l'esperienza professionale del dott. **Emiliano BIASINI**, nonché sulla coerenza del suo profilo con i requisiti attesi per il ruolo di professore di seconda fascia, sono molto positivi.*

*A seguito di attenta valutazione del curriculum e delle pubblicazioni, e sulla base dei giudizi formulati*



# UNIVERSITÀ DI TRENTO

*dai referee, il Comitato ritiene il profilo scientifico del candidato pienamente adeguato al ruolo ed esprime parere favorevole alla chiamata del dott. **Emiliano BIASINI** nel ruolo di professore associato per il settore concorsuale **05/E1** (Biochimica generale e biochimica clinica), settore scientifico disciplinare **BIO/10** (Biochimica).*

F.to Il Presidente  
Prof.ssa Valentina Nider

F.to Il Segretario  
Prof. Yuri Bozzi