

CURRICULUM VITAE

General Information

Name: Norica -Beatrice Nichita; **Date and place of birth:** April 12, 1970, Bacau

Current academic position: Senior Researcher I, Head of the Viral Glycoproteins Department, Deputy Director, Institute of Biochemistry of the Romanian Academy (IBRA), Splaiul Independentei 296, Sector 6, Bucuresti; Tel: (+4).021.223.90.69 , nichita@biochim.ro

Education and formation:

2015- to date Habilitation in Biology, MO 4718/11.08.2015;

2000-2001 Post-doctoral studies, University of Oxford, Biochemistry Department;

1997-2000 PhD in Biology, Specialty: Biochemistry, IBRA;

1988-1993 B.Sc in Biochemistry, Faculty of Biochemistry, University of Bucharest

1984-1988 Baccalaureate, "Vasile Alecsandri" High School, Bacau

Professional experience:

2005- to date Senior Researcher I, Head of the Viral Glycoproteins Department, IBRA. Our group investigates the Hepatitis B and C viruses and their interaction with the host cells, in order to identify novel targets for antiviral therapy. We also design and produce novel HBV and HCV antigens in alternative expression systems (mammalian cells, plants and algae) for potential vaccine development.

2001-2007 Senior Researcher III and II (IBRA) and Wellcome Trust "Academic Visitor" (3 months/year), University of Oxford, Biochemistry Department, Glycobiology Institute, UK. The studies performed aimed to establish the antiviral properties of the iminosugars and their mechanism of action against enveloped viruses.

2000-2001 Royal Society post-doctoral fellow at the University of Oxford, Biochemistry Department. The major objective of the project was to understand the mechanisms underlying the folding of BVDV envelope glycoproteins, a surrogate model to study HCV *in vitro*.

1997-2000 Senior Researcher at IBRA and NATO-Oxford University PhD student (3 months/year) at the University of Oxford, Biochemistry Department, UK. The subject of the PhD thesis regarded investigation of the tyrosinase folding pathway, the key enzyme of melanogenesis, using site-directed mutagenesis.

1992-1997 Research assistant at IBRA; Research assistant at the Laboratory for Biological Chemistry, Université des Sciences et Technologies, Lille, France (1996, 6 months, PECO fellowship). I studied the antimicrobial properties of lactoferrin, by site-directed mutagenesis; Research assistant at Centre de Recherches sur les Macromolécules Végétales-CNRS, Université Joseph Fourier, Grenoble, France (1995, 3 months, PICS fellowship). I investigated the interactions of the *Datura innoxia* lectin with physiological ligands.

1993-1994 TEMPUS studentship at the Laboratory for Molecular Oncology, Department of Human genetics, KU Leuven, Belgium. I performed molecular screening of cDNA and YACs libraries to identify and clone the NSP (Neuroendocrine-specific Protein) family of proteins.

Ten selected publications (last 10 years, * corresponding author).

1. Liu Clarke J, Paruch L, Dobrica MO, Caras I, Tucureanu C, Onu A, Ciulean S, Stavaru C, Eerde A, Wang Y, Steen H, Haugslie S, Petreanu C, Lazar C, Popescu CI, Bock R, Dubuisson J and **Branza-Nichita N***. „Lettuce-produced hepatitis C virus E1E2 heterodimer triggers immune responses in mice and antibody production after oral vaccination”. *Plant Biotechnology Journal* <https://doi.org/10.1111/pbi.12743> (2017). IF= 7,4

2. Dobrica MO, Lazar C, Paruch L, Skomedal H, Steen H, Haugslie S, Tucureanu C, Caras I, Onu A, Ciulean S, Branza A, Liu Clarke J* Stavaru C*, **Branza-Nichita N***. „A novel chimeric Hepatitis B virus S/preS1 antigen produced in mammalian and plant cells elicits stronger humoral and cellular immune response than the standard vaccine-constituent, S protein”. *Antiviral Research*, doi: 10.1016/j.antiviral.2017.06.017 (2017). IF=4,2

3. Lazar, C, Uta, M, Petrescu, SM, **Branza-Nichita, N***. „Novel function of the endoplasmic reticulum degradation-enhancing alpha-mannosidase-like proteins in the human hepatitis B virus life

cycle, mediated by the middle envelope protein". Cell. Microbiol., 19, e12653, DOI: 10.1111/cmi.12653 (2017). IF= 4,5

4. Lazar C, Uta M, **Branza-Nichita N***. „Modulation of the unfolded protein response by the human hepatitis B virus". Frontiers Microbiology 2014;5:433. doi: 10.3389/fmicb.2014.00433. eCollection (2014). IF=3,9

5. Rowe IA, Galsinh SK, Wilson GK, Parker R, Durant S, Lazar C, **Branza-Nichita N**, Bicknell R, Adams DH, Balfe P, McKeating JA. "Paracrine signals from liver sinusoidal endothelium regulate hepatitis C virus replication", Hepatology, 2014, 59 (2): 375-384. IF= 11

6. Macovei A, Petrareanu C, Lazar C, Florian P and **Branza-Nichita N***, „Regulation of hepatitis B virus infection by rab5, rab7, and the endolysosomal compartment". Journal of Virology 2013, 87(11):6415-27. IF= 4,6

7. Lazar C, Macovei A, Petrescu S and **Branza-Nichita N***. „Activation of ERAD pathway by human hepatitis B virus modulates viral and subviral particle production." PLoS One. 2012;7(3):e34169. IF=3,7

8. Dorobantu C, Macovei A, Lazar C, Dwek RA, Zitzmann N and **Branza-Nichita N***. „Cholesterol depletion of hepatoma cells impairs hepatitis B virus envelopment by altering the topology of the large envelope protein." J Virol. 2011, 85(24):13373-83. IF = 5,4

9. Pollock S, **Nichita NB**, Böhmer A, Radulescu C, Dwek RA, Zitzmann N. „Polyunsaturated liposomes are antiviral against hepatitis B and C viruses and HIV by decreasing cholesterol levels in infected cells". Proc Natl Acad Sci U S A. 2010, 107(40):17176-81. IF= 9

10. Macovei A, Radulescu C, Lazar C, Petrescu S, Durantel D, Dwek R, Zitzmann N and **Branza-Nichita N***. "Hepatitis B virus requires intact caveolin-1 function for productive infection in HepaRG cells". J. Virol., 84, 243-253 (2010). IF= 5,4

Academic awards:

2010: The "Nicolae Cajal" award for the best paper in virology, awarded by the "Academician Nicolae Cajal" Foundation.

2004: The "Emanoil Teodorescu" award of the Romanian Academy for the series of articles published in the pestivirus field.

Other academic responsibilities

Academic societies/organizations membership: 2016- to date, Vice-president of the Biology and Biochemistry Commission of the National Council for Attesting University Titles, Diplomas and Certificates; **2006-2015**, Scientific Secretary of the Romanian Society for Biochemistry and Molecular Biology; **2011- 2013**, President of the Biology Commission of the National Council for Scientific Research; **2011-2013**, Member of the Biology and Biochemistry Commission of the National Council for Attesting University Titles, Diplomas and Certificates.

Member of international PhD committees: External reviewer for the University of Oxford (2014, 2019).

Scientific evaluation and peer reviewing: Expert of the European Commission, the Life Sciences panel: H2020 FETOPEN-1 (2016-2017) and Marie Curie Fellowships (2016-2019) calls; evaluator of USA-Israel Binational Science Foundation grants (2014, 2016) and in national competitions. Peer reviewer for: Hepatology, Autophagy, PlosOne, Gene, Trends in Biotechnology, Molecular Biology Reports, Antiviral Research, Virology, Liver International, Viruses, Current HIV Research, Proteome Science, Melanoma Research, Journal of Gastroenterology and Hepatology, Bioorganic and Medicinal Chemistry and others.

Scientometric indicators: h-index WOS (Clarivate Analytics): **22**; Articles published in WOS-indexed journals with impact factor: **45**; Citations (WOS) > **1100**; Total impact factor: > **180**; Book chapters published by international publishing houses: **3**; International patents: **3**

30.03.2020

but