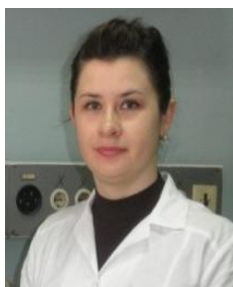


PERSONAL INFORMATION



Tofan (Molodoi) Elena

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Sexul Feminine | Date of birth 12/08/1982 | Nationality Moldova

PROFESSIONAL EXPERIENCE

Biotechnology - the field of biologically active microbial products; techniques for obtaining, separating, purifying and analyzing bioactive principles.

Microbiology – cultivation of the microorganisms, systems for directed biosynthetic processes on microorganisms. I carry out the scientific research within the framework of Institutional and State Programs, Independent Projects for young researchers related to the study of the physiological, biochemical and biotechnological peculiarities of directed synthesis of biologically active substances (lipids, sterols, mannoproteins) by yeasts under the influence of different chemical and physical factors , coordinating compounds, as sources of preparations with practical applications in various fields.

2023-prezent

Senior scientific researcher

lab. Biotechnology of Fungi, Institute of Microbiology and Biotechnology of Technical University of Moldova, Chisinau, Academy street,1

2010-2022

Senior scientific researcher

lab. Yeast Biotechnology, Institute of Microbiology and Biotechnology of ASM

2004-2010

Scientific researcher

Lab. Oleobiotechnology, Institute of Microbiology and Biotechnology of ASM

EDUCATION AND FORMATION

SCIENTIFIC TITLE

RESEARCH LECTURER (2011)

SCIENTIFIC DEGREE

Doctor in biological sciences (2009)

2004-2007

Doctoral Studies

University, Postgraduate and Advanced Training Center of the Academy of Sciences of Moldova, Specialty – 03.00.23 Biotechnology.

1999-2004

Higher education

State University of Tiraspol (based in Chisinau), Faculty of Geography, Specialty Geography - Biology.

Secondary education

1989-1999

Secondary General School №1, Strasheni sity.

Native language

Romanian language

Foreign known language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Participating in the conversation	Oral speech	Ritten expression
French	C1/2	C1/2	C1/2	C1/2	C1/2
English	B1/2	B1/2	A1/2	A1/2	A1/2
Russian	C1/2	C1/2	C1/2	C1/2	C1/2

O bună cunoaștere a proceselor de control al calității (în prezent fiind responsabil cu auditul calității)

Trainings

1. Research techniques in molecular biology, UnASM, Chisinau, Republic of Moldova (July 2-3, 2015)
2. "Protection and exploitation of intellectual property in the Republic of Moldova", AGEPI, Chisinau, Republic of Moldova (19 May 2015)
3. "Methods for the determination of antioxidant activity", UnAȘM - IMB of AȘM, Chisinau, Republic of Moldova (July 20, 2014)
4. "Basic Methods in Molecular Biology", UnAȘM, Chisinau, Republic of Moldova (December 5 - 6, 2013)
5. "Courses in Nano - Bioengineering, Biomaterials and Biocompatibility", MOLD-ERA, FP7 UTM, Chisinau, Republic of Moldova (May 2012)

INFORMATII SUPLIMENTARE

Membership in scientific or professional societies

Member of the Microbiology Society of the Republic of Moldova (FEMS)

- Institutional project 20.80009.5107.16 A - New biologically active microbial preparations for increasing the reproductive and productive potential of animals of zootechnical interest (2020-2023).
- Institutional project 15.817.05.16 A - The use of nanomaterials in the biotechnology of the cultivation of mycelial fungi and yeasts as a strategy to increase biotechnological performance (2015-2018).
- Institutional project 11 817 08 19 A - Innovative microbial technologies for the production of polysaccharides and hydrolytic enzymes with polyvalent uses (2011-2014).
- Institutional project 06. 411. 015 F - Scientific foundation of the directed synthesis of bioactive substances by microorganisms (2006-2010).
- State Program - New diagnostic and treatment methods based on the action of coherent millimeter radiation on medical and biological objects. Department - Evaluation of the effects of the action of low-intensity millimeter radiation on the biosynthetic capacity of microorganisms with significance in biotechnology (2004-2006).
- Independent project for young researchers 12.819.18.08 A - Antioxidant enzymatic preparations obtained from yeasts (2012-2013).
- Independent project for young researchers 09. 819. 08. 03 F - Processing of yeasts resulting from vinification in order to obtain carbohydrates for use in various fields (2009-2010).
- Independent project for young researchers 07.411.11 IND A - Evaluation of the bioactive principles of winemaking yeasts as a source for obtaining biopreparations (2007-2008).

Publications

1. Usatîi A., Molodoi E., Efremova N., Fulga L. The effect induced by millimeter waves with the frequency 53.33 GHz on *Saccharomyces cerevisiae* CNMN-Y-18 yeast strain. *Scientific Annals of "Alexandru Ioan Cuza" University, Section of Genetics and Molecular Biology*, XVI(1), 2015, p. 1-7.
2. Usatîi A., Molodoi E., Chiselita N., Fulga L., Efremova N. Biotechnologies for obtaining β -glucans and mannoproteins from yeasts. *Akademios, Journal of Science and Innovation, Culture and Art*, 2015, Nr. 1(36), p. 87-91. ISSN 1857-0461
3. Molodoi E. Biotechnological peculiarities regarding the production of mannoproteins from the yeast *Saccharomyces cerevisiae* CNMN-Y-18. *Bulletin of the Academy of Sciences of Moldova, Life Sciences*, 2015, Nr. 1(325), p. 167-175. ISSN 1857-064X
4. Chiselita, O.; Chiselita, N.; Efremova, N.; Beşliu, A.; Tofan, E.; Lozan, A.; Daniliş, M. Biochemical composition of yeast biomass from brewing industry waste. *Bulletin of the Academy of Sciences of Moldova. Life sciences*. 2020, 3(342), 143-150. ISSN: 1857-064X.
5. Tofan, E.; Chiselita, N.; Chiselita, O.; Beşliu, A.; Efremova, N.; Lozan, A.; Daniliş, M. Optimizing the process of processing waste from the beer industry and obtaining lipid preparations from yeast biomass. *Akademios*. 2021, nr. 1(60), 51-56. ISSN 1857-0461.
6. Chiselita, N.; Chiselita, O.; Beshliu, A.; Efremova, N.; Tofan, E.; Lozan (Sprincean), A.; Danilis, M.; Rotari, D.; Rotaru, A. Biochemical composition and antioxidant activity of different preparations from microbial waste of the beer industry. *Acta Universitatis Cibiniensis. Series E: Food Technology*. 2022, 1(26), 139-146. eISSN: 2344-150X.
7. Beshliu, A.; Chiselita, N.; Chiselita, O.; Efremova, N.; Tofan, E.; Lozan, A.; Danilis, M. Biochemical composition and antioxidant activity of the mannoprotein preparation obtained yeast biomass from wine industry waste. *Notulae Scientia Biologicae*. 2022, 2(14), 11229, 1-9. ISSN 2067-3205.
8. Beshliu, A.; Chiselitsa, N.; Chiselitsa, O.; Efremova, N.; Tofan, E.; Darie, Gr.; Lozan (Sprincean), A.; Rotari, D. New processes for obtaining mannoproteins from beer yeast sediments and their biochemical properties. *Scientific Study and Research: Chemistry and Chemical Engineering, Biotechnology, Food Industry*. 2022, 1(23), 41-48. ISSN 1582-540X.

Conferences

1. Fulga L., Molodoi E. Innovative technology for obtaining mannoproteins from yeasts of the *Saccharomyces* genus with practical application in various fields. *The Xth International Congress of Geneticists and Breeders*, 28 June-1 July 2015, Chisinau, Moldova, p. 189.
2. Tofan, E.; Chiselitsa, N.; Chiselitsa, O.; Beshliu, A.; Efremova, N.; Lozan, A.; Daniliş, M. Optimization of the waste processing procedure of the beer industry and obtaining lipid preparations from yeast biomass. *Yesterday's heritage – implications for the development of tomorrow's sustainable society*, 11-12 februarie, 2021, Chisinau, Moldova, pp. 215-216.
3. Tofan, E.; Chiselita, N.; Chiselita, O.; Beşliu, A.; Efremova, N.; Lozan, A.; Daniliş, M. The beer yeast biomass as a valuable source of lipids. *National Scientific Symposium with international participation: Modern Biotechnologies - solutions for the challenges of the contemporary world*, 20-21 may 2021, Chisinau, Moldova, p. 159.

Invention patents

1. Invention patent 4227 B1, MD, C 12 N 1/16. *Nutrient medium for the cultivation of the yeast strain Saccharomyces cerevisiae CNMN-Y-18* / E. Molodoi, A. Usatîi, L. Fulga, N. Efremova, N. Chiselita, T. Borisova (MD). Application submitted 31.10.2012, BOPI no. 5/2013.
2. Invention patent 4243 B1, MD, C 12 N 1/16. *Saccharomyces cerevisiae* yeast strain – source of superoxide dismutase / N. Efremova, A. Usatîi, E. Molodoi, L. Fulga (MD). Application submitted 31.10.2012, BOPI no. 7/2013.3.
3. Usatîi, A.; Chiselita, N.; Efremova, N.; Molodoi, E.; Fulga, L.; Borisova, T. Cultivation procedure of the *Saccharomyces cerevisiae* CNMN-Y-20 yeast strain. Invention patent MD 4329, BOPI 2/2015, p. 29-30.
4. Pîrlog, A.; Carapirea, A.; Darie, G.; Cibotaru, E.; Matvienco, N.; Beşliu, A.; Chiselita, N.; Chiselita, O.; Efremova, N.; Tofan, E. *Sow feeding procedure*. Invention patent MD 4817. Deposit date: 2021.04.29. Published 31.08.2022. In: BOPI. 2022, no. 8, p. 57.
5. ROTARI, D.; DARIE, G.; MAŞNER, O.; IURCU, I.; DJENJERA, I.; BEŞLIU, A.; CHISELIȚA, N.; CHISELIȚA, O.; EFREMOVA, N.; TOFAN, E. *Protective medium for preservation by refrigeration of ram semen*. Invention patent MD 4804. Deposit date: 2021.04.29. Published 31.05.2022. In: BOPI. 2022, no. 5, p. 55.

Medals and distinctions

1. Mention diploma at the AGEPI competition "Invention of the year 2011" for the nomination "Invention of the year 2011 created by a young inventor".
2. Molodoi E., Usatîi A., Efremova N., Fulga L. Technology of mannoproteins products obtaining from *Saccharomyces* yeast. Proceedings of the 6th Edition of European Exhibition of Creativity and Innovation "EUROINVENT - 2014", 22-24 may 2014, Iasi, Romania, p. 119 **(gold medal)**.
3. Molodoi E., Usatîi A., Efremova N., Fulga L. Technology for obtaining mannoproteins from *Saccharomyces* yeast. National Research and Innovation Exhibition, Bacău, Romania, September 25-27, 2014 **(silver medal)**.
4. Molodoi E., Usatîi A., Efremova N., Fulga L. Technology of mannoprotein products obtaining from *Saccharomyces* yeast. International Specialized Exhibition "INFOINVENT 2015", XIV Edition, November 25-28, 2015, Chisinau, R. Moldova **(bronze medal)**.
5. Chiselița, N.; Chiselița, O.; Beșliu, A.; Efremova, N.; Tofan, E.; Lozan, A.; Daniliș, M. Biologically active preparation based on yeast biomass from the waste beer industry. *International Exhibition InventCor, 2nd edition*, 16-18 december, 2021, Deva, Romania, pp. 15-16. **(gold medal)**.
6. Pîrlog, A.; Carapirea, A.; Darie, G.; Cibotaru, E.; Matvienko, N.; Beșliu, A.; Chiselița, N.; Chiselița, O.; Efremova, N.; Tofan, E. The procedure for the regulation of reproductive function of sows. *XXVIth International Exhibition of Inventions Inventica*, 22nd June-24th June 2022, Iași, Romania, p. 281. **(gold medal)**.
7. Chiselița, N.; Chiselița, O.; Tofan, E.; Beșliu, A.; Efremova, N.; Sprincean, A.; Daniliș, M. Antioxidant anthocyanin extract and obtaining process from yeast biomass from wine industry waste. *XXVIth International Exhibition of Inventions Inventica*, 22nd June-24th June 2022, Iasi, Romania, p. 278. **(gold medal)**.
8. Chiselița, O.; Chiselița, N.; Tofan, E.; Beșliu, A.; Efremova, N.; Sprincean, A.; Daniliș, M. Antioxidant anthocyanin extract and obtaining process from yeast biomass from wine industry waste. *International Exhibition of Inventions and Innovations "Traian Vuia"*, October 8-10, 2022, Timisoara, Romania, p. 130. **(bronze medal)**.
9. Beșliu, A.; Chiselița, N.; Chiselița, O.; Efremova, N.; Tofan, E.; Sprincean, A.; Daniliș, M.; Pîrlog, A.; Carapirea, A.; Darie, G.; Cibotaru, E.; Matvienko, N. Extraction processes and biologically active preparations obtained from brewer's yeast sediments for use in the animal husbandry. *International Student Innovation and Scientific Research Show "Cadet Inova"*, 7-9 april 2022, p. 3. **(gold medal)**.

ANNEXES