



Curriculum vitae Europass

Informații personale

Nume / Prenume Braicu Cornelia

Naționalitate(-tăți) Romana

Data nașterii

Sex Feminin

Experiența profesională

Perioada 01.20.2021-prezent

Activități și responsabilități principale Cercetare traslațională, dezvoltare de noi terapii țintite, folosind tehnologii de nouă generație și integrare de date de tip bigdata, în diagnosticul și tratamentul personalizat.
Consiliere de specialitate pe domeniile de competență
Instruire/ cursuri de formare / traininguri pentru doctoranzi, post doctoranzi în domeniile științele vieții

Funcția sau postul ocupat CSI, Centrul de Cercetări pentru Genomică Funcțională, Biomedicină și Medicină Translațională al Universității de Medicină și Farmacie IULIU HATIEGANU, Cluj-Napoca

Perioada 01.03.2013-01.20.2021

Activități și responsabilități principale Caracterizarea moleculară – terapii țintite
Consiliere de specialitate pe domeniile de competență
Instruire/ cursuri de formare/traininguri pentru doctoranzi, post doctoranzi în domeniile științele vieții

Funcția sau postul ocupat CSIII/CSII, Centrul de Cercetări pentru Genomică Funcțională, Biomedicină și Medicină Translațională al Universității de Medicină și Farmacie IULIU HATIEGANU, Cluj-Napoca

Perioada 01.10.2010-01.03.2013

Activități și responsabilități principale Studii de biologie celulară moleculară: analiza nivelului de exprimare a genelor și proteinelor implicate în apoptoză și angiogeneza. ARN interferență

Funcția sau postul ocupat Post-doctorand, Centrul de Cercetări pentru Genomică Funcțională, Biomedicină și Medicină Translațională al Universității de Medicină și Farmacie IULIU HATIEGANU, Cluj-Napoca

Educație și formare

Perioada 01.10.2004-30.09.2008 Menționați separat fiecare formă de învățământ și program de formare profesională absolvite, începând cu cel mai recent. (post-universitare, universitare, liceale)

Calificarea / diploma obținută Doctorat - specializarea Biotehnologii (MEC nr. 5837 din 04.11.2008),

Numele și tipul instituției de învățământ / furnizorului de formare Universitatea de Științe Agricole și Medicină Veterinară, Cluj-Napoca

Nivelul în clasificarea națională sau internațională post-universitare, PhD

Perioada 1.10.2005-1.02.2007 Menționați separat fiecare formă de învățământ și program de formare profesională absolvite, începând cu cel mai recent. (post-universitare, universitare, liceale)

Calificarea / diploma obținută Masterat în Biotehnologii Aplicate în Industria Alimentară,

Numele și tipul instituției de învățământ / furnizorului de formare Universitatea de Științe Agricole și Medicină Veterinară, Cluj-Napoca

Nivelul în clasificarea națională sau internațională post-universitare

| | |
|---|---|
| Perioada 01.09.1999-01.06.2004 | Menționați separat fiecare formă de învățământ și program de formare profesională absolvite, începând cu cel mai recent. (post-universitare, universitare, liceale) |
| Calificarea / diploma obținută | Diploma de Inginer Chimist, Specializarea Inginerie Biochimica |
| Numele și tipul instituției de învățământ / furnizorului de formare | Universitatea "Babeș-Bolyai" Cluj, Facultatea de Chimie și Inginerie Chimică |
| Nivelul în clasificarea națională sau internațională | Universitare |
| Limba(i) străină(e) cunoscută(e) | Engleza, Franceza- foarte bine |
| Competențe și abilități sociale | spirit de echipă, comunicare. |
| Informații suplimentare | Includeți aici orice alte informații utile, care nu au fost menționate anterior, de exemplu: persoane de contact, referințe etc. (Rubrică facultativă, vezi instrucțiunile) |

Anexe **Anexa 1. Lucrări publicate**
Anexa 2. Specializări și calificări
Anexa 3. Experiența acumulată (inclusiv managerială) în alte programe/proiecte naționale/internaționale: - experiența managerială

Anexa 1. Lucrări publicate

Coman RA, Schitcu VH, Budisan L, Raduly L, **Braicu C**, Petrut B, Coman I, Berindan-Neagoe I, Al Hajjar N. Evaluation of miR-148a-3p and miR-106a-5p as Biomarkers for Prostate Cancer: Pilot Study. *Genes (Basel)*. 2024 May 4;15(5):584. doi: 10.3390/genes15050584.

Zimta AA, Cenariu D, Tigu AB, Moldovan C, Jurj A, Pirllog R, Pop C, Gurzau ES, Fischer-Fodor E, Pop L, **Braicu C**, Berindan-Neagoe I. Differential effect of the duration of exposure on the carcinogenicity of cadmium in MCF10A mammary epithelial cells. *Food Chem Toxicol*. 2024 Apr;186:114523. doi: 10.1016/j.fct.2024.114523. Epub 2024 Feb 19.

Drula R, **Braicu C**, Neagoe IB. Current advances in circular RNA detection and investigation methods: Are we running in circles? *Wiley Interdiscip Rev RNA*. 2024 May-Jun;15(3):e1850. doi: 10.1002/wrna.1850.

Silaghi H, Pop LA, Georgescu CE, Muntean D, Crișan D, Silaghi P, Lungu I, Nasui BA, Dulf EH, **Braicu C**, Berindan-Neagoe I, Silaghi CA. MicroRNA Expression Profiling-Potential Molecular Discrimination of Papillary Thyroid Carcinoma Subtypes. *Biomedicines*. 2024 Jan 9;12(1):136.

Isachescu E, **Braicu C**, Pirllog R, Kocijancic A, Busuioc C, Pruteanu LL, Pandey DP, Berindan-Neagoe I. The Role of Non-Coding RNAs in Epigenetic Dysregulation in Glioblastoma Development. *Int J Mol Sci*. 2023 Nov 14;24(22):16320.

Schitcu VH, Raduly L, Zanoaga O, Jurj A, Munteanu VC, Budisan L, Petrut B, **Braicu C**, Coman I, Berindan-Neagoe I. TP53 gene implications in prostate cancer evolution: potential role in tumor classification. *Med Pharm Rep*. 2023 Oct;96(4):384-391.

Romitan M, Zanoaga O, Budisan L, Jurj A, Raduly L, Pop L, Ciocan C, Pirllog R, **Braicu C**, Ciuleanu TE, Berindan-Neagoe I. MicroRNAs expression profile in chemotherapy-induced cardiotoxicity in NSCLC using a co-culture model. *Biomol Biomed*. 2024 Jan 3;24(1):125-137.

Rusu I, Pirllog R, Chiroi P, Nutu A, Budisan L, Puia VR, **Braicu C**, Berindan-Neagoe I, Al Hajjar N. Distinct Morphological and Molecular Profiles of NAFLD and NAFLD-associated HCC Revealed by Immunohistochemistry and MicroRNA Analysis. *J Gastrointest Liver Dis*. 2023 Sep 28;32(3):356-366.

Neamtiu IA, Bloom MS, Clark JM, Pop C, Marincas O, Berindan-Neagoe I, **Braicu C**, Gurzau ES. Urinary arsenic and spontaneous pregnancy loss - a hypothesis-generating case-control investigation in western Romania. *Chemosphere*. 2023 Sep;335:139167.

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Baru O, Raduly L, Bica C, Chiroi P, Budisan L, Mehterov N, Ciocan C, Pop LA, Buduru S, **Braicu C**, Badea M, Berindan-Neagoe I. Identification of a miRNA Panel with a Potential Determinant Role in Patients Suffering from Periodontitis. *Curr Issues Mol Biol*. 2023 Mar 8;45(3):2248-2265.

Jurj A, Zanoaga O, Raduly L, Morhan V, Papi Z, Ciocan C, Pop LA, Berindan-Neagoe I, **Braicu C**. Discovering the Biological Significance and Therapeutic Potential of miR-29b-3p in Triple-Negative Breast Cancer. *Int J Mol Sci*. 2023 Mar 6;24(5):5048.

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Bica C, Tirpe A, Nutu A, Ciocan C, Chira S, Gurzau ES, **Braicu C**, Berindan-Neagoe I. Emerging roles and mechanisms of semaphorins activity in cancer. *Life Sci*. 2023 Apr 1;318:121499. doi: 10.1016/j.lfs.2023.121499. Epub 2023 Feb 10.

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Zanoaga O, **Braicu C**, Chiroi P, Andreea N, Hajjar NA, Mărgărit S, Korban SS, Berindan-Neagoe I. The Role of miR-155 in Nutrition: Modulating Cancer-Associated Inflammation. *Nutrients*. 2021 Jun 29;13(7):2245. doi: 10.3390/nu13072245.

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Cojocneanu R, **Braicu C**, Raduly L, Jurj A, Zanoaga O, Magdo L, Irimie A, Muresan MS, Ionescu C, Grigorescu M, Berindan-Neagoe I. Plasma and Tissue Specific miRNA Expression Pattern and Functional Analysis Associated to Colorectal Cancer Patients. *Cancers (Basel)*. 2020 Mar 31;12(4):843. doi: 10.3390/cancers1204084

Drula R, **Braicu C**, Harangus A, Nabavi SM, Trif M, Slaby O, Ionescu C, Irimie A, Berindan-Neagoe I. Critical function of circular RNAs in lung cancer. *Wiley Interdiscip Rev RNA*. 2020 Sep;11(5):e1592. doi: 10.1002/wrna.1592. Epub 2020 Mar 16.

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Braicu C, Buse M, Busuioc C, Drula R, Gulei D, Raduly L, Rusu A, Irimie A, Atanasov AG, Slaby O, Ionescu C, Berindan-Neagoe I. A Comprehensive Review on MAPK: A Promising Therapeutic Target in Cancer. *Cancers (Basel)*. 2019 Oct 22;11(10):1618. doi: 10.3390/cancers11101618.

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Ciocan-Cartita CA, Jurj A, Buse M, Gulei D, **Braicu C**, Raduly L, Cojocneanu R, Pruteanu LL, Iuga CA, Coza O, Berindan-Neagoe I. The Relevance of Mass Spectrometry Analysis for Personalized Medicine through Its Successful Application in Cancer "Omics". *Int J Mol Sci*. 2019 May 25;20(10):2576. doi: 10.3390/ijms20102576.

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Anexa 2. Specializări și calificări:

| Tara | Period of time and field: |
|-----------------------|---|
| Franta (Paris) | 22 August – 2 Septembrie, 2005: Socrates Intensive Program, Food and Health organized by Institute National Agronomique Paris-Grignon, Gent University, Faculty of Bioscience Engineering, The Graduate School VLAG, Wageningen, |
| Polonia (Varsovia) | 28 Mai – 9 iunie 2006: Socrates Intensive Program, Food and Health organized by Warsaw Agricultural University, Gent University, Faculty of Bioscience Engineering, The Graduate School VLAG, Wageningen |
| Romania (Cluj-Napoca) | 2-12 iulie 2006: International summer school: Functional Genomics in Biology and therapy of cancer |
| Romania (Cluj-Napoca) | 28-31 may 2007: International Conference : Functional Genomics in Cancer Biology and Therapy |
| Finlanda (Helsinki) | 9-12 Februarie 2007: Transcription: from molecular mechanism to diseases , HBGS Student Council Symposium, Biomedicum Helsinki |

Anexa 3. Experiența acumulată (inclusiv managerială) în alte programe/proiecte naționale/internaționale:

-experiența managerială:

| Programul/Proiectul | Funcția | Perioada |
|---|---------------------|-----------|
| CNCSIS- TD233/2007- Evaluarea <i>in vitro</i> a acțiunii citotoxice și/sau genotoxice a unor produse fitofarmaceutice | Director proiect | 2007-2008 |
| CNCSIS PD533/2010- COMBINAREA EFECTULUI CHIMIOTERAPEUTIC AL FLAVAN-3-OLILOR CU TERAPIA ȚINTITĂ CU ARN DE INTERFERENȚĂ ÎN TRATAMENTUL CANCERULUI | Director proiect | 2010-2013 |
| CNMP (PNCDI II) Impactul co-contaminării furajelor și soluțiilor de ameliorare care să crească securitatea furajelor, sănătatea animalelor și calitatea alimentelor (PIGcontrol) | Responsabil proiect | 2012-2015 |
| CNMP (PNCDI II) Modularea efectelor pro/anticarcinogenice ale agenților chimici de mediu în terapia multitintită în cancerul de sân (CANCERter-p53) | Director proiect | 2013-2016 |
| PN3-P3-257/30/09/2016-Use of new nanogold materials as delivery systems for modulation of MCL-1/p53 and RNA in ALL-NanoLAL | Director proiect | 2014-2017 |
| PN-II-RU-TE-2014-4-1464, nr 307 din 01/10/2015: Tintirea caili de semnalizare TGF β :o alternativa în terapia cancerului de sân | Director proiect | 2015-2017 |
| PN-III-P1-1.1-TE-2016-2213 cu titlul "Tintirea mecanismelor implicate în rezistența la terapie în cancerul de sân utilizând terapia combinată cu molecule mici și siRNA, în era post genomică | Director proiect | 2017-2020 |
| PN-III-P4-ID-PCE-2020-1625 „Testarea unor compusi mici care țintesc protein kinazele activate mitogenice:succese și oportunități utilizând celule de cancer de sân triplu negativ” | Director proiect | 2020-2022 |
| PN-III-P4-ID-PCE-2020-1625- TESTAREA UNOR COMPUSI MIȚI CARE ȚINTESC PROTEIN KINAZELE ACTIVATE MITOGENIC:SUCCESE ȘI OPORTUNITĂȚI UTILIZANT CELULE DE CANCER DE SÂN TRIPLU NEGATIV | Director proiect | 2021-2023 |

| | | |
|---|---------------------|-----------|
| PN-III-P2-2.1-PTE-2021-0176- Dezvoltarea de aplicații ale toxicogenomicii pentru screening-ul și evaluarea riscului în expunerea la contaminanți (arsen, plumb și cadmiu) din factorii de mediu | Responsabil proiect | 2021-2024 |
|---|---------------------|-----------|

-membru in colectivul de cercetare

| Programul/Proiectul | Funcția | Perioada |
|--|---------|-------------|
| CNMP- PC Identificarea profilului molecular transcriptomic in cancerul de col uterin avansat prin studii de genomica functionala. CERVIX-array | Membru | 2008-2010 |
| CNMP (PNCIDI II) - Identificarea profilului molecular implicat in detectarea, stadializarea si raspunsul imunologic in cancerul de pancreas. PANGEN | Membru | 2008-2011 |
| CNMP-PC -Terapia genică condiționată nanotehnologic în hepatocarcinom. NANOGEN | Membru | 2008-2010 |
| POSCCE 709/2010 „Impactul clinic si economic al identificării profilului molecular transcriptomic si proteomic in terapia neoadjuvanta a cancerului de san triplu negativ”- BREASTIMPACT | Membru | 2010-2013 |
| CNMP (PNCIDI II) “Analiza miARN ca posibili biomarkeri cu valoare de predictie pentru tratamentul cancerului de col uterin, în relație cu expunerea la factorii de mediu, arsen, ftalați și cotinina. (Cervical-arsen-array)” | Membru | 2012-2015 |
| CNMP (PNCIDI II) “Sisteme inteligente de predicție a recurenței și progresiei în cancerul superficial de vezică bazate pe inteligența artificială și date microarray: mRNA tumoral și microRNA plasmatic IntelUro” | Membru | 2012-2015 |
| POSCCE: Impactul clinic și economic al terapiilor personalizate țintite cu anti-microARNuri în reconvertirea rezistenței tumorilor maligne pulmonare- CANTEMIR | Membru | 2016-2020 |
| PN-III-P4-ID-PCE-2016-0795: Abordarea complexa a profilului expozomic in cancerule hormono-dependente de san si prostata si influenta acestuia in genomul tumoral | Membru | 2017-2019 |
| H2020-WIDESPREAD-2016-2017 Teaming Phase1 Titlul proiectului: Romanian Centre of Excellence for Systems Immunology (ROCSI) | Membru | 2017-2018 |
| POC 249/07.05.2020 “Creșterea capacității de cercetare a UMF Iuliu Hațieganu Cluj Napoca, prin dezvoltarea unei infrastructuri de tip CLOUD conectată la resursele globale de informare” | Membru | 2020-2022 |
| PN-III-P2-2.1-PED-2019-2536,, Dezvoltarea unui sistem inteligent combinat imagistic-citologic-molecular pentru stratificarea riscului, ghidarea diagnosticului si a managementului in cancerul tiroidian-TIRCITOGEN” | Membru | 2020-2022 |
| Decoding the immuno-inflammatory axis in rare non-medullary thyroid cancer as an innovative approach for novel combinatory therapeutic approach - Member - EU and Ministry of Research Innovation and Digitalisation, competition PNRR/2022/C9/MCID/I8, grant no. 81/ 2022 | Membru | 2023 - 2026 |
| Lung Squamous Cell Carcinoma Therapeutic Targets Using Systems-Level Machine Learning Based On Single Cell RNA Sequencing - Member - EU and Ministry of Research Innovation and Digitalisation, competition PNRR/2022/C9/MCID/I8, grant no. 83/2022 | Membru | 2023 - 2026 |

04.09.2024

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