

Huri BULUT, Ph.D.



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Medical Biochemistry Department Istanbul /TURKEY

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Education:

Ph.D. Programme : Bezmialem Vakif University School Of Medicine,
Department of Clinical Biochemistry 2015-2019 **Score: 94/100**
Marmara University School of Medicine, department of
Clinical Biochemistry 2013-2015

Master Programme: Microbiology and Clinical Microbiology
Istanbul University,Faculty of Medicine, Istanbul, Turkey
2006- 2009 **Score: 80/100**

University : Uludag University Department of Biology, Bursa, Turkey
2002-2006 **Score: 3.61/4.00**

Graduation degree: 3. of Faculty
High School: Bandirma Anatolian High School , Balikesir, Turkey 1999-2002
Primary School: K.E.V Private High School, Balikesir, Turkey 1991-1999

Ph.D. Thesis: Production of NAD + Dependent Formate Dehydrogenase Enzyme from *Candida boidinii* and Enhancement of Enzyme Activity and Thermal Stability by Protein Engineering

Work Experience:

1. Asst. Prof. Dr., Istinye University, Faculty of Medicine, Medical Biochemistry Department 2019....
2. Research assistant, Bezmialem Vakif University School Of Medicine, Biochemistry Department, Istanbul, Turkey. 2016-2019
3. Researcher, University of Exeter, College of Life and Environmental Science,Exter/UK 2017-2018Feb
4. Ceo, HD Biotechnology R&D Trade Company, Istanbul, Turkey. 2012-2018
5. Researcher, Oksante R&D Laboratory, Istanbul, Turkey. 2011-2012
6. Sales Department Manager, Farmasina Medical Products Company, Istanbul, Turkey 2009-2011

7. Fellowship, Microbiology Laboratory, RT-PCR Lab. Antwerp, Belgium 2008-2009
8. Fellowship, Public Health Institute, Brussel, Belgium 2008-2009
9. Fellowship, Vaccine and Infectious Disease Institute, Belgium 2008-2009
10. Internship, Enzyme Fermentation Laboratory, TUBITAK M.A.M GMBAE, Gebze, Turkey 2005
11. Internship, PCR Laboratory, Uludag Universitiy, Faculty of Medicine 2004
12. Internship Food Lab. Topraklar Milk Products Company, Bursa, Turkey 2003

Scientific Researches:

1. Burhan Engin, Ali Tanakol, Huri Bulut, Abdullah Songür, Hayriye E Vehid, Eral Gökalp, Zekayi Kutlubay, Defne Özkoca, Yalçın Tüzün, Server Serdaroglu. Changes in Serum TNF-like Weak Inducer of Apoptosis (TWEAK) Levels and Psoriasis Area Severity Index (PASI) Scores in Plaque Psoriasis Patients Treated With Conventional Versus anti-TNF Treatments. *Int J Dermatol* 2020 Feb;59(2):207-215. doi: 10.1111/ijd.14646
2. Adnan KirmiT, Kasim Takım, Ezgi Durmuş, Eray Metin Güler, Vildan Betül Yenigün, Huri Bulut, Abdürrahim Koçyiğit. Rheum ribes L.'nin etanol ekstraktlarının malign melanoma hücreleri üzerine anti-kanser etkinliği. *J Health Sci Med* 2020; 3(2): 148-152
3. Serin P.S., Kandil A., Bulut H., Kaskavalci T., Bulut E. C., Demirci Tansel C. Effects of Tempol in Lipopolysaccharide-Induced Liver Injury. *Eur J Biol* 2019; 78(2): 147-155
4. Kocyigit A., Aydogdu G., Balkan E., Yenigun V.B., Guler E.M., Bulut H., Koktasoglu F. Quercus pyrenaica Honeydew Honey with High Phenolic Contents Cause DNA damage, Apoptosis and Cell Death Through Generation of Reactive Oxygen Species in Gastric Adenocarcinoma Cells. *Integr Cancer Ther.* 2019 Jan Dec;18:1534735419876334. doi: 10.1177/1534735419876334.
5. Kilic A., Ustunova S., Usta C., Bulut H., Meral I., Demirci T.C., Gurevin E., Angiotensin II type 2 receptor blocker PD123319 has more beneficial effects than losartan on ischemia/reperfusion injury and oxidative damage in isolated rat heart. *Can J Physiol Pharmacol.* 2019 Jul 30.
6. Kaptan Z, Dar KA, Kapucu A, Bulut H, Üzüm G. Effect of enriched environment and predictable chronic stress on spatial memory in adolescent rats: predominant expression of BDNF, nNOS, and interestingly malondialdehyde in the right hippocampus. *Brain Res.* 2019 Jul 9:146326. doi: 10.1016/j.brainres.2019.146326.
7. Elbay A, Ercan Ç, Akbaş F, Bulut H, Ozdemir H. Three new circulating microRNAs may be associated with wet age-related macular degeneration. *Scand J Clin Lab Invest.* 2019 Jul 5:1-7.
8. Takmaz O, Yozgatli D, Ozaltin S, Ozbasli E, Kocyigit Y, Kuran SB, Bulut H, Gungor M, Buyru F, Bastu E. Can follicular Eammprin and BMP 4 levels predict ICSI outcome? *J Assist Reprod Genet.* 2019 May 8. doi: 10.1007/s10815-019-01459-0.

9. Aydin O , Pehlivanlı f. , Karaca g. , Aydin g. , Altunkaya C. , Bulut H., Aydinuraz K. May dexpantenol, platelet-rich plasma, and thymoquinone provide new hope to maintain liver regeneration after partial hepatectomy? *Turk J Gastroenterol* 2019; 30(9): 826-34
10. S Selek, M Esrefoglu, I Meral, H Bulut, HG Caglar, G Sonuc, C Yildiz, ES, Teloglu, N Dogan, B Yuce, E Tiftik and N Bayindir. Effects of *Oenothera biennis* L. and *Hypericum perforatum* L. extracts on some central nervous system myelin proteins, brain histopathology and oxidative stress in mice with experimental autoimmune encephalomyelitis. *Biotechnic & Histochemistry*, 2019, DOI 10.1080/10520295.2018.1482001
11. Meydan S., Esrefoglu M., Selek S., Tosunoglu Akbas E., Ozturk O., Kurbetli N., Bayindir N., Bulut H., Meral I. Protective effects of caffeic acid phenethyl ester and thymoquinone on toluene induced liver toxicity. *Biotechnics and Histochemistry*, doi: 10.1080/10520295.2018.1554825
12. Saygin B., Esrefoglu M., Bayindir N., Tok OE., Selek S., Bulut H., Ozer OF., Ozturk A., Yilmaz O., Meydan S. Protection with thymoquinone against formaldehyde-induced neurotoxicity in the rats. *Bratisl Med J* 2018; 119 (11).
13. Mesut Seker, Hayati C. Isen, Nidal Çevirme, Sinem Aydin, Ahmet Bilici, Huri Bulut, Ayse I. Yasin, Ezgi Coban, Tarik Demir, Altay Aliyev, Abdurrahim Kocyigit, Haci M. Turk. Role of Urotensin-2 in 5-Fluorouracil-Related Arterial Vasoconstriction in Cancer Patients. *Oncol Res Treat*. 2018 DOI: 10.1159/000490120
14. Pehlivanlı F. , Aydin O., Karaca G. , Aydin G., Devrim T. , Bulut H. , Bakar B and Daphan Ç.E. Healing of Ischemic Colon Anastomosis in Rats Could Be Provided by Administering Dexpantenol or Coenzyme Q10. *J. Clin. Med.* 2018, 7, 161; doi:10.3390/jcm7070161
15. Abdurrahim Kocyigit, Eray Metin Guler, Ersin Karatas, Hifa Caglar, Huri Bulut. Dose-dependent proliferative and cytotoxic effects of melatonin on human epidermoid carcinoma and normal skin fibroblast cells. *Mutat Res Gen Tox En* 2018 829–830 (2018) 50–60
16. Sinem Yıldırım, Meltem Bakka, Huri Bulut, Sahabettin Selek. Quantitative evaluation of dental anxiety indicators in the serum and saliva samples of children treated under general anesthesia. *Clinical Oral Investigations* 2018 /doi.org/10.1007/s00784-018-2340-2
17. Gökhane Karaca, Faruk Pehlivanli, Oktay Aydin, Canan Altunkaya, Hafize Uzun, Mehmet Niyaz, Hüseyin Özden, Huri Bulut. The effect of mesenchymal stem cell use on intraabdominal adhesions in a rat model. *Annals of Surgical Treatment and Research* 2018, doi.org/10.4174/asrt.2018.94.2.57
18. Bastu E, Zeybek U, Gurevin E, Yüksel Ozgor B, Celik F, Okumus N, Demiral I, Dural O, Celik C, Bulut H, Ilkay Armutak E, Baysal B, Buyru F, Yeh J. Effects of Irisin and Exercise on Metabolic Parameters and Reproductive Hormone Levels in High-Fat Diet-Induced Obese Female Mice. *Reprod Sci.* (2017)

19. Nehir Aytan A, Bastu E, Demiral I, Bulut H, Dogan M, Buyru F Relationship between hyperandrogenism, obesity, inflammation and polycystic ovary syndrome Gynecol Endocrinol. 2016 Mar 7:1-5.
20. Kaptan Z, Akgün-Dar K, Kapucu A, Dedeakayoğulları H, Batu Ş, Üzüm G. Long term consequences on spatial learning-memory of low-calorie diet during adolescence in female rats; hippocampal and prefrontal cortex BDNF level, expression of NeuN and cell proliferation in dentate gyrus. Brain Res. 2015 Aug 27;1618:194-204
21. Huri Dedeakayoğulları, Ayşe Emel Önal
Çevre-İnsan Sağlığı İlişkisi Açısından Su ve Su Analizinin Önemi
İstanbul Tıp Fak. Dergisi 2009;72: 65-70
22. Huri Dedeakayoğulları, Osman Şadi Yenen, Emel Önal
İstanbul'da Hepatit E Virüsü (HEV) İnfeksiyonunun Seroprevansı Üzerine Bir Çalışma İstanbul Tıp Fak. Dergisi 2010;127: 68-72

Oral Presentation:

1. Aysu Kılıç, Savaş Üstünova, Birsen Elibol, Huri Bulut, İsmail Meral, Emine Gülderden Şahin. Angiotensin IV'ün Diyabetik Sıçanlarda Öğrenme-Bellek ve Hipokampal Oksidatif Stres Üzerine Etkisi. Türk Fizyolojik Bilimler Derneği 45. Ulusal Fizyoloji Kongresi. 31 Ekim – 03 Kasım 2019 Kuşadası-Aydın/ Turkey
2. Savaş Ustunova, Aysu Kılıç, Huri Bulut, İsmail Meral, İnci Alican. Timokinonun Streptozotosin ile Diyabet Oluşturulan Sıçanların İzole Kalplerinde İskemi/Reperfüzyon Hasarı Üzerine Etkisi. Türk Fizyolojik Bilimler Derneği 45. Ulusal Fizyoloji Kongresi. 31 Ekim – 03 Kasım 2019 Kuşadası-Aydın/ Turkey
3. Huri Bulut, Büşra Yüksel, Mehmet Gül, Meryem Eren, Michail Isupov, Berin Yelmazer, Barış Binay, Jennifer Littlechild, Abdurrahim Koçyiğit. Nad+ Dependent Formate Dehydrogenase Production and Enhancement Of Activity via Protein Engineering. TBS International Biochemistry Congress, 26-30 October 2018, Bodrum, Turkey
4. Fatih Aktas, Huri Bulut, Jennifer Littlechild, Berin Yelmazer, Baris Binay. Thermostable L- Amino acid Dehydrogenase; Purification, Characterization and Kinetic Mechanism. 1. EBAT Eurasia Biochemical Approaches & Technologies Congress. 27-30 October 2018. Antalya, Turkey
5. Adnan Kirmit, Abdurrahim Kocyigit, Kasım Takım, Vidan Betul Yenigün, Huri Bulut, Eray Metin Guler, Ezgi Balkan. The Investigation Of Anti-Cancer Effectiveness Of Rheum Ribes L. Root Extract On Malignant Melanom Cell Line. 1. Uluslararası GAP Matematik-Mühendislik-Fen ve Sağlık Bilimleri Kongresi. 4-7 Ekim 2018, Sanlıurfa, Turkiye
6. Huri Bulut, Ezgi Bakan, Betul Yenigun, Abdurrahim Kocyigit. Investigation of In-vitro Anticancer Activity of Plant Parasite *Cuscuta campestris*. 1. Uluslararası Geleneksel ve Tamamlayıcı Tıp Kongresi. 19-22 Nisan 2018, İstanbul, Turkiye

Scientific Posters:

1. Huri Bulut, Busra Yuksel, Kubra Bozali, Baris Binay. An Investigation On Effects Of Metals Ions On NAD+-Dependent Formate Dehydrogenase Activity in Both Reaction Direction. 2nd International Eurasia Biochemical Approaches Technologies Congress. 26-30 October 2019, Antalya, Turkey
2. Huri Bulut, Berin Yelmazer, Simone De Rose, Michail Isupov, Jennifer Littlechild, Fatih Aktas, Baris Binay. Thermostable L- Amino acid Dehydrogenase Purification, Characterization and Kinetic Mechanism 12. Conference on Protein Stabilization. 16-18 May 2018, Vilnius, Lithuania
3. Yelda Deligoz Bildaci, Huri Bulut, Meltem Gursu, Omer Elcioglu. Effect of Ketoanalogues Inflammation in Diabetic Nephropathic Rats. 55. ERA-EDTA congressNephrology Dialysis Transplantation. 24-27 May 2018, Copenhagen, Denmark.
4. Investigation Of In Vitro Anticancer Activity Of Plant Parasite Cuscuta Campestris. Uluslararası Geleneksel ve Tamamlayıcı Tıp Kongresi. 19-22 April 2018, İstanbul, Turkey (Sözlü bildiri)
5. Huri BULUT, Ahmet TULEK, Sahabettin SELEK, Baris BINAY An Investigation On Effects Of Metals On Formate Dehydrogenase Activity. 13. International Symposium on Biocatalysis and Biotransformations. 9-13 July 2017, Budapest, Hungary
6. B. Yuksel, D. Sahin, H. Bulut, A. Kocyigit. A new Approach to Recurrent Pregnancy Losses: Anti-cardiolipin- specific Peptide Screening with Phage Display Technique . FEBS Congress 2017, Jarusselam, Israel
7. Huri BULUT, Umut BUYUK, Berk BULUT, Aytac JAFERZADE, Busra YUKSEL, Sahabettin SELEK. MicroRNA Expression are altered in Endometrial Tissues of PCOS Women. 42.FEBS Congress from molecules to cells and back. 10-14 September 2017, Jerusalem, Israel.
8. Ersin KARATAŞ, Huri BULUT, Şahbettin SELEK, Abdurrahim KOÇYİĞİT,Barış BİNAY. Characterization and Production via Recombinant DNA Technology of Oxalate Decarboxylase Enzyme. 13.International Symposium on Biocatalysis and Biotransformations. 9-13 July 2017, Budapest, Hungary
9. Dr.Cem Gökhane, Prof. Süha Yalçın, Dr. Hakkı Kumuşoğlu, Martin James, Dr. Enrico Appiani, Huri Dedeakayoğulları Msc. Introducing Healtier Table Sugar: G-SUGAR_2. FOOD-OMICS CONGRESS 2011, Aula Magna, Cesena Italy (Poster session)
10. H. Dedeakayoğulları, H.Kumuşoğlu, G. Biçim, A.S.Yalçın. Antioxidant Capacity of G-Sugar: A Healty Table Sugar. SFRR-Europe 2011 Meeting, September 7-10 2011, İstanbul (Poster session)

11. Huri Dedeakayogullari, Ahmet Kilinc, Gokhan Bicim, Eray Metin Guler, Ziba Mochberi Oskouei A.Suha Yalcin. Comparative Analysis of Different Parts of Vicia faba for Production of a Protein Isolate with High Antioxidant Activity, L-Dopa and Phenolic Content 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
12. Eray Metin Guler, Mustafa Kesmen, Huri Dedeakayogullari, Ziba Mochberi Oskou Production of Hen Egg IgY Liposomes Against Different Salmonella Species. 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
13. Eray Metin Guler, Ulker Anadol Kelleci, Hayriye Gul Polat, Huri Dedeakayogullari, Gokhan Bicim Ahmet Kilinc, A. Destina Yalcin, A.Suha Yalcin The Role of Oxidative/Antioxidative Balance , Vascular Pathophysiology and Inflammation in Migraine 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
14. Savas Ustunova, Sevan Gurun, Ebru Gurel, Huri Dedeakayogullari, Cihan Demirci Tansel Staphylococcus aureus-Induced Sepsis and Coenzyme Q10 Therapy: an Isolated Rat Heart Study, 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
15. Sinem Ozdemir, Asli Kandil, Tugba Kaskavalci, Huri Dedeakayogullari, Cihan Demirci Tansel. The Effects of Tempol on Liver in LPS-Induced Acute Endotoxemia in the Rat. 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
16. Deniz Erol,Savas Ustunova, Ebru Gurel, Huri Dedeakayogullari, Cihan Demirci Tansel. Role of Ischemic Preconditioning and Tempol in Ischemia/Reperfusion Injury in Isolated Rat Heart. 38. FEBS CONGRES, July 6-11 2013, Saint Petersburg, Russia (Poster session)
17. Huri Dedeakayoğulları, Eray Metin Güler, Makbule Deniz Borucu, A. Destina Yalçın, A. Suha Yalçın Diyabetik Nöropatili Hastalarda Oksidatif Hasarın İncelenmesi 25. Ulusal Biyokimya Kongresi, 3-6 Eylül 2013, İzmir (Poster session)
18. Ziba Mochberi Oskouei, Huri Dedeakayoğulları, Eray Metin Güler, A. Suha Yalçın Vicia faba'dan L-DOPA ve Antioksidan İçeriği Yüksek Ekstrakt Eldesi 25. Ulusal Biyokimya Kongresi, 3-6 Eylül 2013, İzmir (Poster session)

Projects:

Project Number	Role in the Project	Project Name	Dates(Start-End)	Amount of Support (TL)
Ministry of Industry Teknogirisim Fund /0039TGSD2012	Chair	Fresh Food Raw Materials and Herbal Products from Vicia faba, L-Dopa and Antioxidant Source	06/06/2012 29/07/2013	98.600,00

KOSGEB R&D and Inovation Programe / 4152	Chair	<i>Designing and prototyping of Lam dyeing device for use in routine laboratories</i>	07/04/2014-07/03/2016	194.29,60
Bezmialem Vakif University Scientific research projects department fund	Chair	<i>Purification, Characterization and Standardization of Formate Dehydrogenase Enzyme (FDH) Produced by Recombinant DNA Technology</i>	08/09/2016-2019	19.310,40
Bezmialem Vakif University Scientific research projects department fund	Chair	In Pursuit of a New Perspective: Evaluation of the Relationship between Insulin Resistance and Poly Cystic Ovary via miRNA Analysis	03/03/2015-2018	14.250,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Production of Oxalate Decarboxylase enzyme to be used in the measurement of Oxalate by Recombinant DNA Technique</i>	2014-2015	20.000,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	Effects of <i>Oenothera biennis</i> L. and <i>Hypericum perforatum</i> L. extracts on myelin sheet and microRNA gene expression profile in experimental autoimmune encephalomyelitis	13/03/2015 16/01/2017	20.000,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	Investigation of possible target miRNAs in In etiopathology of patients with age-related macular degeneration	13/03/2015 16/02/2017	19.548,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Investigation of T lymphocyte CD (cluster of differentiation) expressions in patients with multiple sclerosis</i>	15/06/2016 14/03/2017	9.828,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	Therapeutic effect of the <i>Oenothera biennis</i> and <i>hypericum perforatum</i> on EAE model: an investigation through jak-stat signal pathway	15/06/2016 14/03/2017	12.128,40
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Evaluation of effects of Oenothera biennis and hypericum perforatum extracts on cytokines , AQP4, HSP70 and treatment outcomes in C57b1/6 mice suffering Multiple Sclerosis (MS) induced by experimental autoimmune encephalitis method</i>	15/06/2016 14/03/2017	7.797,60
Bezmialem Vakif University Scientific research projects department fund	Researcher	Investigation of Single Carbon Metabolism in patients with Multiple Sclerosis (MS)	15/06/2016 14/03/2017	6.825,60
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Investigation of Steroid Metabolism in Multiple Sclerosis (MS) Patients</i>	03/05/2016 14/03/2017	2.667,60
TUBİTAK 1002 - 116S138	Scholarship	<i>Development of format measurement kit by enzymatic method</i>	15/07/2016 15/07/2017	30.000,00

Ongoing Projects

Project Number	Role in the Project	Project Name	Dates(Start-End)	Amount of Support (TL)
Bezmialem Vakif University Scientific research projects department fund	Chair	<i>Screening of Peptide Sequences Specific to Recurrent Pregnancy Losses by Phage Display and Development of a Diagnostic Kit</i>	22/05/2019--	22.500,00

Bezmialem Vakif University Scientific research projects department fund	Chair	<i>Validation of Format Dehydrogenase Enzymes with Increased Activity and Stability with Protein Engineering and Comparison with Commercial Enzymes</i>	22/05/2019--	22.500,00
TUBITAK 1002 - 121356	Researcher	<i>Investigation of therapeutic effects of plazomicin and doxycycline in metabolically modified cancer cells by improving drug resistance</i>	06.06.2019---	45.000,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Production of Superficial-Membrane Immunogenic Protein and Immunogenic Membrane YajC Protein of Brucella Melitensis Bacteria Rev 1 Strain Using Recombinant DNA Technology and Development of Immunochemical Test Kits</i>	10/04/2019--	22.500,00
Bezmialem Vakif University Scientific research projects department fund	Researcher	<i>Evaluation of the Effects of Mucosa Associated Invariant T Cells (MAIT) on Childhood Asthma</i>	10/04/2019--	22.500,00

Congress, Courses , Training and Symposia:

1. 12. Conference on Protein Stabilization. 16-18 May 2018, Vilnius, Lithuania
2. Uluslararası Geleneksel ve Tamamlayıcı Tıp Kongresi. 19-22 April 2018, İstanbul, Turkey
3. 13. International Symposium on Biocatalysis and Biotransformations. 9-13 July 2017, Budapest, Hungary
4. 42.FEBS Congress from molecules to cells and back. 10-14 September 2017, Jerusalem, Israel
5. X Annual Congress of the European Proteomics Association, İstanbul, Türkiye, 2016
6. 38. FEBS Congress 2013, Saint Petersburg, Russia, 2013-11-10
7. National Biochemistry Congress, İzmir, Türkiye, 2013
8. 2.proteomics symposium, Acibadem University,Istanbul,(3 May 2012)
9. Quagen,SABioscience PCR Array Seminar,Marmara University, Istanbul, (27 March 2012)
10. Cosmetology courses, Flatofis,Istanbul, (28-29 April 2012)
11. Proteomics symposium, Acibadem university, Istanbul,(2011)
12. SFRR-Europe 2011 Meeting ‘Redox Biology and Micronutrients: from signaling to translation and back’ (7-11 Sep 2011)
13. 2. FOOD-OMICS Congress 2011, Aula Magna, Cesena Italy (2011)
14. National Blood Bank Congress, Antalya (2008)
15. Turkish Microbiology Group Meeting (2007)
16. Bogazici University Project And Research Symposium, Istanbul, (2007)
17. III. National Virology Congress, Bursa, (2007)
18. III. National Molecular Biology And Genetics Students School, Istanbul, (2005)

Skills:

1. All methods of Chemistry Lab
2. Protein measurement methods (ELISA, Bradford, Lowry etc...)
3. Western Blotting technique
4. Protein Purification and Characterization Techniques
5. DNA cloning techniques
6. Protein crystallization (x-RAY)
7. Applying thermal stability assay by Circular Dichroism
8. Cell Culture Techniques
9. PCR and Related Methods (qPCR, RT-PCR vb.)
10. Flow cytometry
11. Phage Display Techniques (Biopanning)
12. Tumor modelling Assays and Screening (IVIS)
13. Use molecular visualization system programme (pymol, swiss model)

References**- Prof. Jennifer Littlechild**

Professor of Biology Chemistry, Biocatalysis Centre, University of Exeter, The Henry Wellcome Building for Biocatalysis, Stocker Road, Exeter, EX4 4QD , UK
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