Tecniospring
INDUSTRY

Anamaría Sánchez Daza

Research interests

Cell culture – Cell and Gene Therapy – Molecular Biology - Protein expression – Protein purification

Extensive experience in biotechnology and biomedicine focused on molecular biology, heterologous protein expression, cell culture, and gene and cell therapy. Critical thinking skills, persevering, proficient, proactive, considerate, positive attitude, and a good teamwork scientist.

Education

2012-2017: PhD in Chemical and Biotechnology Engineering Sciences, Faculty of Physical and Mathematical Sciences, Universidad de Chile.

2009-2012: Master in Biochemistry, (Graduated with honors), Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile.

2005-2012: Biochemistry, (Graduated with honors), Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile.

Experience

March 2020-present (6 months): Adjunct Professor: Biology Applications in Science and Engineering, Faculty of Physical and Mathematical Sciences (FCFM), Universidad de Chile.

August 2018 – present (24 months): Postdoctoral Researcher "Scale-up of human Adipose-derived Stem Cells culture for diabetes type 1 cell therapy" at Institute for Cell Dynamics and Biotechnology (ICDB), Faculty of Physical and Mathematical Sciences (FCFM), Universidad de Chile.

October 2017- July 2018 (10 months): Postdoctoral Researcher "Comparison of Antartic-origin xylanase mutants' activity" at CeBiB, Faculty of Physical and Mathematical Sciences (FCFM). Universidad de Chile

November 2015-October 2016 (11 months): Visiting student at Jude Samulski lab, Gene Therapy Center, University of North Carolina at Chapel Hill, NC, USA.

2013-2015 (18 months): Teaching Assistant "Biology and Biotechnology", FCFM, Universidad de Chile.

2011-2015 (24 months): Teaching Assistant "Advanced Laboratory of Biotechnology processes", FCFM, Universidad de Chile.

October 2011-March 2012 (6 months): Research Assistant "Adenoviral vectors for alcoholism gene Therapy", Centre for Biochemical Engineering and Biotechnology (CYBIB), Universidad de Chile

Publications

Saez Hidalgo J., Oróstica K.Y, Sanchez–Daza A., Olivera–Nappa A. (2020) BEST: a Shiny/R web-based application to easily retrieve cross-related enzyme functional parameters and information from BRENDA. *Bioinformatics [in press].*

Sanchez A. C., Ravanal M.C., Andrews B. A., Asenjo J. A. (2019). Heterologous expression and biochemical characterization of a novel cold-active α-amylase from the Antarctic bacteria Pseudoalteromonas sp. 2-3. *Protein Expression and Purification*, 155, 78-85, DOI:10.1016/j.pep.2018.11.009

ACCIÓ Generalitat de Catalunya Government of Catalonia

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Sanchez A. C., Li C., Andrews B. A., Asenjo J. A., Samulski R. J. (2017). AAV gene therapy for alcoholism: Inhibition of mitochondrial Aldehyde dehydrogenase enzyme expression in Hepatoma cells. *Hum. Gene Ther*;28(9):717-725, DOI:10.1089/hum.2017.043,

Lucero A. T., Mercado S. A., Sánchez A. C., Contador C. A., Andrews B. A., et al. (2017). Purification of adenoviral vector serotype 5 for gene therapy against alcoholism using anion exchange chromatography. *J. Chem. Technol*. 92(9):2445-2452 Biotechnol., DOI:10.1002/jctb.5255

CONFERENCES

2019 Oral Presentation: X Workshop CeBiB, Metabolic engineering, bioinformatics and genomics for biotechnological applications. Santiago, Chile. “Scale-up of hASC culture for diabetes cell therapy” (Sánchez, A.C., León, L., González E., Andrews, B.A., Gerdtzen, Z.P., Caviedes, P., and Asenjo, J.A.)

2018 Oral Presentation: 8th Latin-American Symposium on animal cell technology (SLATCC), Rio de Janeiro, Brazil. “Scale-up of human adipose-derived mesenchymal stem cells culture for diabetes cell therapy” (Sánchez, A.C., León, L., González E., Andrews, B.A., Gerdtzen, Z.P., Caviedes, P., and Asenjo, J.A.)

2017 Oral Presentation: Biochemical and molecular engineering XX, California, USA. “AAV gene therapy for alcoholism: Inhibition of mitochondrial aldehyde dehydrogenase enzyme expression in hepatoma cells”. (Sánchez A.C., Chengwen Li, Samulski R.J., Andrews B.A., and Asenjo J.A)

2015 Poster: IV International Society for cellular therapy South and Central America regional meeting (IV ISCT), “Recombinant AAV and scAAV vectors for alcoholism treatment: Inhibiting aldh2 gene expression in human hepatoma cells". (A.C. Sánchez, A.T. Lucero, B.A. Andrews, and J.A. Asenjo)

OTHER ACTIVITIES

August 2018 – August 2019: Undergraduate thesis tutoring “Suspension culture of human adipose-derived stem cells for cell therapy”, Advisor: Ziomara Gerdtzen, Student: Lorna León, Civil Biotechnology Engineer, 2019, Universidad de Chile.

2017- present: Lecturer at “Meet the science” scientific communication project for High school students at CeBiB, Universidad de Chile.

2016- present: Training and support of undergraduate, MSc, and PhD students at CeBiB, Universidad de Chile.

ADDITIONAL INFORMATION

Languages: Spanish Native, Advanced English (writing, speaking, listening).

Awards: 2011 Ranked No 1 in Undergraduate Program
2012 CONICYT Doctoral Fellowship
2015 CONICYT “PAI” Fellowship: Doctoral Thesis within Industry
2018 CONICYT “PAI” Fellowship: Postdoctoral Insertion within Industry
2019 Selected to participate at 70th Lindau Nobel Laureate Meeting

*CONICYT: “National Commission for Scientific and Technological Research"

Contact information

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