

# Marcos Adriana Viera Messias, ERT

Associate Toxicologist, ERT

## Education:

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- 03/2005    **Analytical Toxicology Specialist**, UNICAMP Universidade Estadual de Campinas – Campinas, Brazil
- 01/2005    **B.Sc. Pharmaceutical Sciences with focus on Pharmaceutical Biochemistry**, Pontifícia Universidade Católica de Campinas – Campinas, Brazil

## Work History:

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- 04/2021 – Present    **Associate Toxicologist**, Affygility Solutions  
Authored over 200 health-based exposure limit/permitted daily exposure (HBEL/PDE) monographs and occupational health categorizations reports. Authored technical responses to client toxicology questions regarding active pharmaceutical ingredients.
- 04/2019 – 03/2021    **Mass Spectrometry Laboratory Coordinator**, Mérieux Nutrixcience  
Managed analytical laboratory services and staff. Researched and authored risk assessments using OECD toolbox, VEGA Hub (Virtual models for property evaluation of chemicals within a Global Architecture), and Toxtree (Toxic Hazard Estimation by Decision Tree Approach). Developed and implemented strategy to comply with OECD 442C (in chemico skin sensitization models). Performed leachable and extractable toxicology risk assessments.
- 03/2017 – 03/2019    **Head Analyst**, Myralis Pharma  
Managed the forced degradation studies team. Provided technical support to the pharmaceutical formulation department regarding excipients and API compatibility. Performed toxicological risk assessments for impurities in active pharmaceutical ingredients. Responded to regulatory inquiries from ANVISA.
- 07/2016 – 02/2017    **Senior R&D Analyst**, Zay/Takeda

	<p>Performed analytical method development and validation. Forced degradation study design and implementation. Performed toxicological risk assessments for impurities in active pharmaceutical ingredients. Authored toxicological reports for impurities in the formulation.</p>
08/2015 – 03/2016	<p><b>Analytical Development Researcher</b>, EMS Pharmaceutical Inc.</p> <p>Performed analytical method development and validation. Forced degradation study design. Performed toxicological risk assessments for impurities in active pharmaceutical ingredients.</p>
08/2015 – 03/2016	<p><b>Agrochemical and Pharmaceutical Analysis Manager</b>, LABMASS Laboratory</p> <p>Performed analytical method development and validation. Forced degradation study design. Performed toxicological risk assessments for impurities in active pharmaceutical ingredients.</p>
03/2014 – 03/2021	<p><b>BKX Consultoria</b>, Toxicology Consultant</p> <p>Authored over twenty (20) HBEL/PDE toxicological reports. Performed QSAR analysis using in silico tools to support toxicological risk assessments. Provided toxicology support for forensics analysis. Provided general toxicology training to clients.</p>
03/2010 – 11/2011	<p><b>GLP Toxicology Study Director</b>, Plantec Laboratories</p> <p>Design and implementation of the toxicology laboratory from initial planning to the recognition of GLP studies by INMETRO [Brazilian accreditation body]. GLP Study Director involving oral LD50, dermal LD50, inhaled LC50, skin sensitization, skin and eye irritation, and mutagenicity (AMES and micronuclei) assays.</p> <p>Authoring and reviewing GLP toxicology reports.</p>
03/2010 – 11/2013	<p><b>Toxicology Professor</b>, UNIP, PUC-Campinas, Faculdades Eintein Limeira and Faculdade De Americana</p> <p>Prepared for and instructed college level courses on general toxicology, analytical toxicology, forensic toxicology, environmental toxicology, and food safety toxicology (ADIs, pesticide residues, and others).</p>

## **Certifications, Professional Activities, and Affiliations:**

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2019 – Current **The International Association of Forensic Toxicologists (TIAFT)**

2018 – Current **Brazilian Society of Toxicology (SBTOX) – Member**

**ERT Certified**

## **Publications:**

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Lanaro, R., Messias, M. Bordin, D. et al. "Capítulo 26: Intoxicações Intencionais Por Praguicidas" [Chapter 26: Intentional Intoxications with Pesticides] Toxicologia forense [Forensic Toxicology], edited by Daniel Dorta, et al., Blucher, 2018, pp. 520-541

Costa, J., Bordin, D.C., Messias, M., Lanaro, R., Cazenave, S., Forense. A.: Pesquisa de drogas vegetais intererentes de testes colorimétricos para identificação dos canabinoides da maconha (Cannabis sativa L.). Química Nova (Online), v. 35, p. 2040-2043, 2012

## **Invited Lectures and Presentations:**

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Messias, M. (2021). Estratégia de relatório para cálculo de PDE e interpretação de relatório. 15o Congresso Deo Farmácia E Bioquímica De Minas Gerais. São Paulo, Brazil. 22 Sep 2021. [This virtual congress presentation discussed reporting strategy for PDE calculation and report interpretation] 22 Sep 2021.

Lanaro, R., Messias, M. Intoxicações Agudas: Epidemiologia, Aspectos Clínicos e Diagnóstico Laboratorial. 2008. (Curso de curta duração ministrado/Outra). [Prepared for and instructed short course at PUC-Campinas on Acute Poisonings: Epidemiology, toxicological and clinical aspects, and laboratory diagnosis.]

Messias, M. (2007). Padronização e validação de método para determinação de paraquat em urina e plasma por espectrofotometria. Congresso Brasileiro de toxicologia. [This presentation at the Brazilian Society of Toxicology biennial congress covered the development of an analytical method to quantify paraquat in the urine of patients entering the hospital with intoxication by this substance, as well as the presentation of the toxicological properties of paraquat.]

Messias, M.; Lanaro, R. Toxicologia Forense e identificação de substâncias psicoativas. 2006. (Curso de curta duração ministrado/Outra). [Prepared for and instructed college course at PUC-Campinas on toxicology forensics of psychoactive substances.]

Messias, M.; Lanaro, R. Toxicologia Forense e perícia Criminal: Identificação de Entorpecentes. 2005. [Prepared for and instructed college course at PUC-Campinas on forensic and criminal toxicology regarding narcotic drugs.]

Messias, M. (2005). Professor convidado para ministrar aula sobre intoxicação por Benzodiazepínicos. 2005. (Curso de curta duração ministrado/Outra). [Invited professor at PUC-Campinas to teach class on benzodiazepine poisoning.]

XIV Congresso Brasileiro de Toxicologia, 2005, Recife - PE. Revista Brasileira de Toxicologia. São Paulo: Sociedade Brasileira de Toxicologia 2005. v. 18. p. 169-169. [This presentation at the Brazilian Society of Toxicology biennial congress to discuss the development of an analytical method for the Campinas forensic laboratory for blood alcohol concentration (BAC) in cases of driving under the influence. In addition, discuss toxicological endpoints for alcohol.]

Avaliação da toxicidade da interação entre Alimentos e Medicamentos contendo cafeína (Congress resume presentation) Congresso de Toxicologia do CIATOX, 2003, Botucatu, 2003. [A presentation at the Brazilian Society of Toxicology biennial congress on the development of a MS EXCEL spreadsheet to calculate caffeine intake in relation to food and medication intake and to determine possible interaction.]

APPROVALS	
COMPANY: AFFYGILITY SOLUTIONS LLC	
ORIGINATOR: _____	DATE: _____
QUALITY <u>          <i>Matthew</i>          </u>	DATE: 2026-05-13
MANAGEMENT <u>          <i>Don</i>          </u>	DATE: 2026-05-13
EFFECTIVE DATE: _____	2026-05-13





**EUROTOX**

*This is to Certify that*

MARCOS ADRIANO VIEIRA MESSIAS

*may use the title*

**ERT**

**EUROPEAN  
REGISTERED  
TOXICOLOGIST**

*whilst registered with the*  
PORTUGUESE

*Register of Toxicology*

  
*Signature*

May 15, 2023  
*Date*

EUROTOX  
Basle, SWITZERLAND



# CERTIFICATE *of* SIGNATURE

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## SIGNER

**DEAN CALHOUN**

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