



INOVATEC
IV INTERNATIONAL MEETING
ON HEALTH INNOVATION



IV International Meeting on Health Innovation (IV INOVATEC) II Federal District Technological Innovation Convention

November | 10 - 12 | 2023, Brasília, Brazil

People & Science Pesquisa Desenvolvimento e Inovação LTDA, Brazil
Núcleo de Pesquisa em Medicina Tropical da Faculdade de Medicina da
Universidade de Brasília (NMT/FM-UnB), Brazil
Núcleo de Pesquisa em Morfologia e Imunologia Aplicada da Faculdade
de Medicina da Universidade de Brasília (NuPMIA/FM-UnB), Brazil

IV International Meeting on Health Innovation

IV INOVATEC 2023

Book of abstracts of the IV INOVATEC 2023 under the theme
“innovation in health as a tool for social transformation” held in
Brasília, Brazil

November 10-12, 2023

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A publication of:

Biopropectum, Lda – Open access publishing Porto, Portugal

Ficha técnica

Título: IV INOVATEC 2023 – Book of Abstracts

Coordenadores: Dra Alexandra Plácido, MSc Ariane Nogueira

Editora: *Biopropectum*, Lda – Open access publishing: Journal of Global Innovation (JGI)

ISSN: 2184-7738 (Online)

Volume 5, Issue 1

Special Issue: 2024

**IV International Meeting on Health Innovation (IV INOVATEC)
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The articles were submitted in English, Portuguese, or Spanish.
The authors hold exclusive responsibility for the content.

FOREWORD

Dear colleagues,

It is with great pleasure that we welcomed you to the IV International Health Innovation Meeting - IV INOVATEC, which brings the central theme "Health innovation as a tool for social transformation." The event was a pioneer in the field of health innovation in the Central-West region of Brazil, promoting the popularization of Science & Technology, the dissemination of scientific knowledge with excellence, stimulating the innovation ecosystem, and fostering the collaboration between professional and academic sectors, public and private, from Brazil and abroad.

In this edition, the event raises discussions on the topics of innovation in diagnosis, prevention, and treatment of diseases; innovations in public health; innovations in health management; nanotechnology; natural products; innovation in aesthetics; disruptive technologies and artificial intelligence applied to health; personalized medicine and sports health.

IV INOVATEC consolidates itself as a business and technology dissemination space due to the II Technological Innovation Fair of the Federal District. In total, 65 institutions from Brazil, Argentina, South Africa, England, Spain, France, Denmark, Portugal and the United States participated in the event. Among these, 40 companies from Brazil, Portugal and France had the opportunity to bring the latest news in the area of health at the technology fair, with more than 4 thousand people attending over the 3 days. There were more than 30 hours of debate, more than 1000 people registered at the conferences and 50 experts speaking on two stages: the inovatec stage and the health tech stage. It was undoubtedly an event that marked the health ecosystem in Brazil

The Organizing Committee

ABOUT THE EVENT

The IV INOVATEC program included:

Short courses: registration independent of the main event; 4 hours certificate; at the Faculty of Medicine/UnB, Campus Darcy Ribeiro, Asa Norte, Brasília, DF. The short courses were held simultaneously from 8:00 am to 12:00 pm on November 10th, 2023.

Conferences: lectures with great national and international speakers, with representatives from Brazil, England, Portugal, South Africa, Argentina, among others.

II Health Tech Day: small presentations by technology-based companies, bringing startups together with large companies and investment funds.

Vila Tech Coffee Brasília: an exhibition fair of special coffee that explores how innovation and technology are revolutionizing the coffee industry, from cultivation to your cup.

Academic and extension activities: presentation of research works in posters and oral communication, with publication of abstracts in an international scientific journal; education action and medication dispensing station; posturology care, vitamin supplementation and cupping therapy.

Awards for the best works and startups presented.

The event also featured **cultural presentations** with local artists and interactive coffee break for **networking**.

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Parámetros de calidad e inocuidad del cultivo de *Cannabis sativa* L. para uso medicinal producido en condiciones controladas con agua residual tratada

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RESUMEN

El reúso de aguas residuales tratadas en agricultura es una práctica que beneficia al ambiente, la salud humana y la economía, brindando oportunidades de riego en sitios con escasez hídrica. La OMS y FAO ofrecen directrices con estándares y regulaciones sobre su calidad y manejo. El cultivo de *Cannabis sativa* L. con fines medicinales requiere de estándares específicos según su uso. El objetivo del trabajo fue evaluar la calidad e inocuidad del agua de reúso (AR) generada en el sistema de tratamiento de líquidos cloacales domiciliarios de Puerto Madryn (Patagonia, Argentina) y de las flores de cannabis cultivadas con AR según la normativa vigente. Se realizó un cultivo en condiciones controladas con 2 tratamientos: 1- riego con agua potable y fertilizante comercial (control) y 2- riego sólo con AR. Se evaluó el contenido de metales pesados (As, Cd, Pb y Cr) y calidad microbiológica (coliformes totales y *E. coli*) en el AR y en las flores cosechadas. Todos los parámetros medidos en flores y AR fueron inferiores a los límites máximos permitidos. Los resultados muestran que el uso de AR con calidad irrestricta según directrices de la OMS sería posible para la producción de *Cannabis sativa* L. con fines medicinales.

Palabras-clave: Metales pesados; Calidad microbiológica; Agua de reúso.