

# THE *IDentiCA* PROGRAM NEW RESEARCH AVENUES IN INTERDISCIPLINARY DENTISTRY

by Cinzia Fornai



Through the Interdisciplinary Dentistry for Central America - IDentiCA program, VieSID - Vienna School of Interdisciplinary Dentistry and CSUCA - Superior Council of Central American Universities have joined forces for the advancement of interdisciplinary research and high education in Central America.

## 3a. The Clinical Functional Diagnostic Initiative

The diagnostic questionnaire and its occlusal index combined with the occlusogram are effective tools for the initial functional diagnostic. Accepting the invitation of C. Alvarado Barrios, workshops will be held by A. Londoño and M. Assis (presented from left to right in the figure below) aimed at implementing these clinical tools within the Dentistry Department of the San Carlos University, Guatemala. A survey study will be led by C. Fornai to assess the level

### 3b. Morphometric investigation of the face in Guatemala

The function of the masticatory system is intimately related to the morphology of the head and face. In fact, oral rehabilitation takes into consideration cephalometric parameters. Within the IDentiCA program, we want to comprehensively analyse cephalometric data available through hospital databases, with the aim to explore facial shape variation of Central American populations. C. Alvarado Barrios (left side of the figure below) and J. A. Andrino Alvarez (right

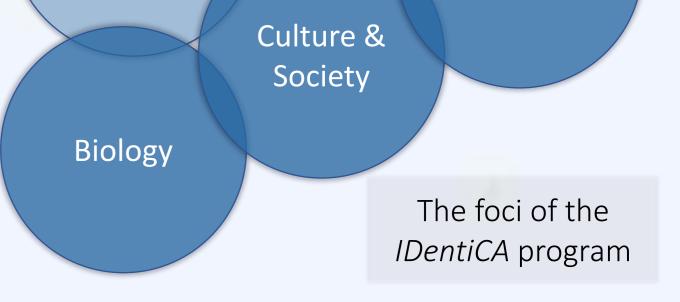


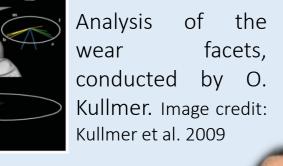
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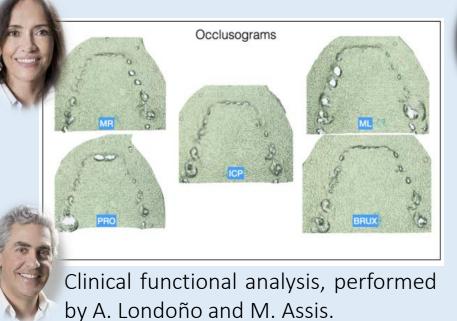
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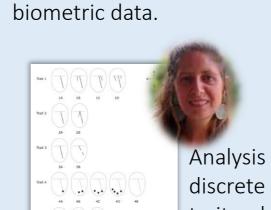


morphometric Geometric analysis of the dental arches, conducted by C. Fornai. Image credit: Úry et al. 2019



Assessment of oral pathologies, by Karol Gabriela Ramírez Chan

3D face scan analysis, conducted



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E. Herrera-Paz and L. Arguello,

collaborators in Honduras, will

collect epidemiologic and

discrete dental traits, by L. P. Menéndez. Image credit: Krenn et al, 2019

3c. Occlusal function of indigenous populations in Honduras

The Lenca and the Maya Chorí are Central American indigenous populations. The groups living

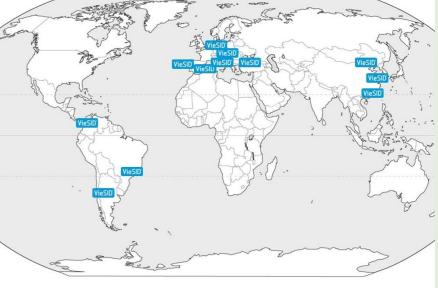
by N. Baldi. Image credit: Gerbis, 2022.

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Founded in 2008 and directed by Christian Slavicek, the Vienna School of Interdisciplinary Dentistry – VieSID focuses on education and research within the field of interdisciplinary dentistry based on the concept of functional dentistry put forward by Professor Rudolf Slavicek.

an international organization teaching VieSID is worldwide. It counts members and affiliated in each corner of the World, and collaborates tightly with the Medical University of Vienna.





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in the forest surrounding the city of La Esperanza, Honduras, share the same environment and consume the same local products, including corn, beans, eggs, coffee, but are genetically and phenotypically distinct. They live according to a traditional lifestyle and, because of their limited means and geographical isolation, they do not have access to medical or dental treatment. Accordingly, clinical, epidemiological and morphological information about these populations are lacking.

To assess oral epidemiology and function of the Lenca and the Maya Chorí, we aimed to conduct a complete evaluation of the 3D morphology of the dental arches and face, pattern of dental wear in relation to functional aspects such as bite forces, and clinical condition, including possible presence of muscle and TMJ pain (see figure above). These data will provide crucial evidence informing oral medicine both for the sake of Central American populations and for a deeper understanding of oral function in relation to morphology and diet.

The Consejo Superior Universitario Centroamericano -CSUCA was founded in 1948 as the first organization for NUMERON OF COMPANY the integration of higher education in Central America.

CSUCA, currently presided by Carlos Alvarado Cerezo, brings together 24 Central American public universities.

Since its establishment, it has worked uninterruptedly

for the advancement of the Central American academic

system.

VieSID Summerschool 2022, in honor of Professor Rudolf Slavicek