ORAL HEALTH IMPLICATIONS OF ADVANCES IN THE TREATMENT AND PREVENTION OF HIV: OPPORTUNITIES FOR INTER-PROFESSIONAL COLLABORATION

Research Day 2023
School of Dentistry - University of Washington

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OUTLINE

- Integrating oral health within HIV Kenyan national policy system
- Oral innate immune system - West Kenya
- Alcohol use disorders - Peru
- Acknowledgment
Leap into Action for Oral Health!

Join us on Tuesday, May 10 at 3pm ET for a one-hour online event that will show how NIDCR is moving dental, oral, and craniofacial research forward.

Learn More
NASCOP
Committed to continue on the path towards HIV and STI epidemic control as a means of achieving universal health coverage (UHC).

Kenya HIV Prevention and Treatment Guidelines 2022
NASCOP

Committed to continue on the path towards HIV and STI epidemic control as a means of achieving universal health coverage (UHC).

Kenya HIV Prevention and Treatment Guidelines 2022
Kenyan Pediatric Studies collaboration

- Cross-sectional study
- Assess parents/caregivers’ report of both oral manifestations of HIV, and behaviors, knowledge and attitudes towards oral health

**2015-16**

**UW Global Innovation Fund**
- Calibration study
- UON faculty and dental Community Health Officers (COHOs)

**2016**

**IADR Regional Development grant**
- Advocating For HIV Research In Children & Adolescents: AFRICA Project
- Junior faculty (3 Kenya 1 Nigeria) trained at the Summer Institute of Dental and Craniofacial Research

**2018-19**

**NIH R21 Fogarty**
- Oral innate immune system children 3-4y
- HIV+ / HEU /HUU

**2022**

**UW Global Innovation Fund**
- Decreasing inequalities in global oral health: Let’s publish your thesis!

**2021-22**

**UW SOD SunStar Award**
- Cross-sectional study (KPS cohort)
- Baseline data on oral and systemic inflammation

**2017-21**

**NIH D71 Planning grant**
- Oral HIV research

**2021-23**

**NIDCR CFAR Supplement grant**
- Longitudinal study (KPS cohort)
- Salivary AMPs, candida

**2018-22**

**SUBMISSIONS: NIDCR R01/ NIH G11/Supplement Bioethics**
- Impact of aging on oral immune system of female sex workers participating at the NH Mombasa Cohort.
- Creating research infrastructure through EMR between dental and pediatric HIV clinics
- Informed consent

**2023**
NIH D71: “TABASAMU: A multidisciplinary collaboration on expanding research capacity in oral health and HIV/AIDS.” The aims of TABASAMU (smile in Swahili) are to identify a pioneer generation of oral health researchers, create a network of mentors, and to develop an educational program (MPH/PhD) for long-term training in oral health and HIV.
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**STAKEHOLDER ANALYSIS**

<p>| Planning | Virtual interviews and meeting | On-site interviews and meetings | Final report | Stakeholder analysis manuscript submission | Identifying mentors | Send out survey | Virtual and in-person meetings | Database of mentors and their research areas | Finalizing webinar logistics | Webinar on oral health and HIV | Identifying trainee candidates | Finalizing Tabasamu social media group as pipeline tool for trainee recruitment | Launching Tabasamu social media group | Meeting trainee candidates | Focus groups in Nairobi, Mombasa, and Kisumu | Oral Health Mini session at Inter-CFAR symposium | <strong>SUBMIT FOR PUBLICATION PROCEEDINGS OF THE MEETING</strong> | <strong>FINALIZE D43 APPLICATION</strong> | <strong>D43 SUBMISSION</strong> |
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OUTLINE

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- Oral innate inmune system - West Kenya
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[Image of a child smiling]

To assess the extent to which HIV infection influences the occurrence and progression of oral diseases among HIV/AIDS Kenyan children and to create research capacity in global oral health by expanding current lab infrastructure to allow analysis of salivary AMPs in the context of HIV.
Figure 1. Study Hypotheses: Arrows show known associations. Colored question marks (?? & ?) indicate hypothesized associations to be assessed in this longitudinal study. Orange arrow (→) represents Aim 1. Light blue arrow (←) represents Aim 2.
Figure 1. Study Hypotheses: Arrows show known associations. Colored question marks (?? & ??) indicate hypothesized associations to be assessed in this longitudinal study. Orange arrow (→) represents Aim 1. Light blue arrow (→) represents Aim 2.

Figure 3. Overview of the study

Enhance existing HIV research capacity by building upon existing lab assets allowing locals to conduct AMPs analyses.
<table>
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<th>ACTIVITY</th>
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<td>Pilot and study kick-off logistics</td>
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<td>Baseline preliminary analysis</td>
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<td>NIH Annual report 2023</td>
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<td>Six-month preliminary data analysis</td>
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<td>Shipping samples to either Nairobi or UCLA</td>
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<td>Final report</td>
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<td>RO1 grant submission</td>
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ETHICS

BIONICS
OUTLINE

- Integrating oral health within HIV Kenyan national policy system
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NIH R56: “Vitamin D and Alcohol Use Disorder (AUD) on Progression of Dental Disease in MSM with and without HIV”

To generate foundational evidence on the association of AUD and oral health in MSM with HIV, strengthen electronic systems of care to integrate HIV and related dental care by enhancing research capacity for future intersectional research on oral health and HIV, and create and refine our study protocol procedures for a future NIH R01 looking into Vitamin D, AUD, and dental disease in MSM in Peru.
Figure 1. Study Hypotheses. Arrows show known associations. Colored question marks (?&?) indicate hypothesized associations to be assessed in this prospective study. Green Arrow (→) represents Aim 1. Orange arrow (←) represents Aim 2.
Important Features for Global Oral Health Research

- Research Electronic Data Capture
- Electronic data capture software for clinical and translational research
- Browser-based: no need to download software, can access from any device at any time

About
About

- **Research Electronic Data Capture**
  - Electronic data capture software for clinical and translational research

- **Browser-based**: no need to download software, can access from any device at any time

- **No-cost** for non-commercial research entities

- **User-friendly interface** for project building and design- no coding experience necessary
  - Cross-sectional and longitudinal projects across multiple sites

Ref: https://projectredcap.org/about/
Important Features for Global Oral Health Research
Survey Instrument Design

- Enable any instrument as a survey with the click of a button

- Customizable features such as:
  - Survey Pagination
  - Visual Display
  - Survey distribution modalities (QR code, url link, email)

- Able to integrate videos, images, and hyperlinks into surveys

- Incorporate E-consent framework into survey
Data Access Groups organized by tablet
Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e., show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: vit3_1 - Suplemento 1. ¿Cuánto tiempo (en años o ...

- Advanced Branching Logic Syntax
  - Special Functions
    - Show the field ONLY if...
      - \[ \text{vit1} = '1' \text{ or } \text{vitquanto} = '1' \text{ or } \text{vitquanto} = '2' \text{ or } \text{vitquanto} = '3' \text{ or } \text{vitquanto} = '4' \]

- OR -

- Drag-N-Drop Logic Builder
  - Field choices from other fields
    - (drag a choice below to box on right)
CASl Yale-l - CASI-MH1 Survey

Lo invitamos a participar en este proyecto para desarrollar el presente cuestionario que explora el tratamiento contra el VIH, los trastornos asociados con el consumo de alcohol (dependencia o trastorno del estado del ánimo) y el deterioro neurocognitivo asociado con el VIH (problemas de atención y memoria a corto plazo) entre hombres que tienen sexo con hombres y mujeres trans, que reciben su control médico en IMPACTA. Por supuesto, no existen respuestas correctas o incorrectas a estas preguntas. Siendo el cuestionario anónimo, el personal del proyecto no tendrá acceso a estas respuestas. Muchas gracias por su contribución!

Fecha de Visita:
* must provide value

1. ¿Usted está participando en algún estudio clínico en actualmente?[*] [148ASAA]
* must provide value

Si
No

reset

2. ¿Cuántos años cumplidos tiene?[*] [148ASAB]
* must provide value

3. Hasta que nivel educativo estudió:

Mínimo

reset
Traducir su Interfaz

En esta aplicación, los instrumentos de recolección de datos se pueden redactar y ver en distintos idiomas. La aplicación también puede utilizar todos los tipos de teclado que ofrecen los dispositivos inteligentes. La tarea restante es traducir la interfaz del usuario para los recolectores de datos.

A través de esta interfaz, los recolectores de datos pueden descargar y almacenar su propia traducción de la interfaz de usuario. Hay una traducción por defecto para cada recolector de datos.

- Default English
- Spanish

Latam - IECS
R56 VITA
Last Download: 2022-06-01 04:43 PM
Records (0 new; 0 modified)

- Collect Data
- Check for Other Records on the Server
- Data Search
- Sync Archive
- Refresh Setup & Data
- Download Server Records
- Project Admin
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¿Has visto alguna de estas características en tu boca antes (caries dental cervical dientes maxilares)?

- Si
- No

10. La gente habitualmente rechaza a las personas cuando descubre que tiene el VIH.

- Muy de acuerdo
- De acuerdo
- En desacuerdo
- Muy en desacuerdo

GRACIAS HAS FINALIZADO TU PARTICIPACION....GAME OVER!!
R21 FIC: Dynamics of HIV-infection, Oral Innate Immunity and The Development of Oral Diseases in Children (Grant #: 1R21TW012033-01A1)
Sponsor: NIH - FOGARTY INTERNATIONAL CENTER/NIDCR
Dates: 07/01/2022 – 06/30/2024

D71 TABASAMU: A multidisciplinary collaboration on building up research capacity in oral health and HIV/AIDS (5D71TW011823-02)
Sponsor: NIH - FOGARTY INTERNATIONAL CENTER/NIDCR
Dates: 06/07/2021 – 03/31/2023

R56 Vitamin D and Alcohol Use Disorder on Progression of Dental Disease in MSM with and without HIV (1R56DE029639-01)
Sponsor: NIH - NATIONAL INSTITUTE OF DENTAL & CRANIOFACIAL RESEARCH
Dates: 09/24/2021 – 09/23/2023

CFAR UW/Fred Hutch Center for AIDS Research: The impact of HIV on salivary antimicrobial peptides in Kenyan children (2P30 AI027757)
Sponsor: NIH – DIVISION OF AIDS – NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASE
Dates: 9/5/19 - 3/31/23

SunStar: Integrating oral health into the pediatric HIV care continuum: Baseline data of oral and systemic inflammation
Sponsor: SunStar Gift Fund
Dates: 10/1/17 - 3/31/23

UW Global Innovation Fund: Decreasing research inequalities in global oral health: Let's publish your thesis!
Sponsor: UW Global Affairs
Dates: 12/7/20 – 3/12/23
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