ICDP workshop on Deep Drilling in the Turkana Basin:  
*Tracking the Environmental Forces Driving Hominin Evolution*  

July 11-14, 2022 Workshop  
Tribe Hotel, Nairobi, Kenya

**PROJECT GOAL** - Recover a sediment core spanning last 4 Ma from the Turkana Basin

**WORKSHOP GOALS**: to path the way towards an ICDP full proposal, including
- Generate project ideas, including through new collaborations
- Outline and develop diverse research questions/hypotheses
- Matching scientific ideas with drilling and funding opportunities, identification of potential funding sources
- Establish impactful directions for broader impacts/outreach with Kenyan partners
  
Consider timelines for developing/submitting proposals

**DAY #1**  
Meeting check-in beginning at 8:30 am

Day 1- Morning Session 1 at 9:00 am  
Welcome and Overview for Workshop (5 min- Cat Beck and Lydia Olaka)  
Participant Introductions (1 min/person- 45 min)  
ICDP funding opportunities and operational support (30 min - Thomas Wiersberg)

COFFEE at 10:15

Day 1- Morning Session 2 at 10:30 am: Overview talks (20 min) on geology, paleoclimate, tectonics, paleoanthropology, and modern ecosystems of the Turkana Basin
  
Turkana Basin overview (20 min- Craig Feibel)  
Plio-Pleistocene paleoclimate (20 min- Melissa Berke)  
East African Rift System overview (20 min- Chris Scholz)  
EARS Hydroclimate (20 min- Lydia Olaka)  
Paleoanthro for geologists- (20 min- Chris Campisano)  
Modern ecosystems (20 min- James Last)

LUNCH at 12:15 pm

Day 1- Afternoon Session 1 at 1 pm
Participant lead session on goals and challenges with DDTB

COFFEE at 2:30 pm

Day 1- Afternoon Session 2 at 3 pm
Goal: Collectively explore research interests and synergies, and generate a list of research questions, project objectives, and deliverables
Announcements (outline expectations for tomorrow/next steps; excursion info)

DAY #2
Day 2- Morning Session 1 at 8:30 am
Announcements
Recap of Day 1 Afternoon- introduction of emerging themes
Break into Discussion Theme groups focused on emerging themes

COFFEE BREAK at 10:15 am

Day 2- Morning Session 2 at 10:30 am
Reports back from Discussion Theme Groups

LUNCH at 12:15 pm

Excursions to the National Museum of Kenya
Departing at 1:30 pm from the front of the hotel in busses

DAY #3-
Day 3- Morning Session 1 at 8:30 am: Practicalities of planning and previous work (10 min talks with Q&A)
Previous work/What is known?
Cores- Melissa Berke
Outcrops- Craig Feibel
Turkana Archaeology/Paleoanthro- Kylo Manthi/Emmanual Ndiema
Geothermal- Geoffery Mibei
Turkana Conditions- Anders Noren/Craig Feibel/John Malala
Seismic Assessment- Chris Scholz
Downhole Logging- Simona Pierdominici/Christian Zeedan

COFFEE BREAK at 10:15 am

Day 3- Morning Session 2 at 10:30 am: What needs to take place before drilling? (90 min total)
Community Relationships (30 min)- Lydia Olaka/Rahab Kinyanjui/Dino Martins/Kat Cantner
What are the needs on the ground? What's worked? What needs to be developed?
Participant Discussion Groups (~1 hr)- Contributions to pre-drilling science and outreach
LUNCH at 12:15 pm

Day 3- Afternoon Session 1 at 1 pm
- Report back from Morning Session (10 min- Verena Foerster)
- Presentation of compiled list of science questions (5-10 min- Jose)
  - Group Discussion- “Last call” -> what’s missing?
- Pro’s and Con’s of three drilling strategies (10-15 min- Cat)
  - Where to drill? (10-15 min- Chris Scholz)
  - Discussion by Discipline 1 (with leader and rapporteur ~30 min)
    1) Are there general pro’s/con’s that we missed?
    2) Are there other ideas for drilling?
    3) How would your science/interests be enabled by the transect?
    4) Are there research questions you would add?
    5) Known-unknowns: Is there any information/knowledge ‘missing’?
    6) Are there any barriers your science would encounter?

COFFEE at 2:30 pm

Day 3- Afternoon Session 2 at 3 pm
- Reports back from each group (~30 min)
- Discussion by Discipline 2 (with leader and rapporteur- 45 min)
  - What would you need to make your science happen?
    - Including pre-drilling data
    - How do things need to be handled/order of operations?
    - Logistical considerations (permitting/equipment/etc.)
    - Funding- how much money (approx) do you need?
- Reports back from each group (~30 min)
- Closing synthesis and intro of what resources do we bring (5-10 min- Cat)

DAY #4-

Day 4- Morning Session 1 at 9 am
- How do we fund a) the drilling, b) the science, c) the outreach/broader impacts?
  - How have other projects been funded? (15 min - Anders and Thomas)
- Discussion groups (decide on how to break these up?) (~60 min with a rotate)
  1) What funding opportunities exist?
  2) What academic, industry, and community partnerships are key?
  3) How could you contribute to the broader funding efforts?
  4) What capacity building/outreach is essential to include?

COFFEE at 10:30 am

Day 4- Morning Session 2 at 11 am
- Reports back from each group (~30 min)
- Timeline of planning (how do we get where we want to go?)
Preliminary timeline
Workshop report
Funding deadlines
Conclusions and thanks!

LUNCH at 12:30 pm

Informal conversation and departures