Announcing a design competition: Let's Go There (fresh takes on the portable toilet)

Who: Anyone from any field (art, architecture, agriculture, engineering, humanities etc.), who is interested in supporting ecological sanitation with their designs and creative ideas. Students are warmly encouraged to participate!

What: The New EcoLu -- Designing next-generation porta-potties

Where: The Soil Factory, on Brewery Lane, off Route 13 (or 13A) (just down the hill from Ithaca Beer in south Ithaca).

When: Saturday, 16 April 2020, from 11 am to 4 pm (lunch will be provided to those who RSVP)

Why: Ecological Sanitation (EcoSan) is about recovering the <u>organic underutilized resources</u> from our bodies (OUR stuff = water, nutrients, organic material in excreta) for use in agriculture. Replacing synthetic fertilizers with bio-based ones will lower our carbon footprint, reduce pollution and build soil health. Novel porta-potties (EcoLus) that house source-separating toilets will expose people to the idea of recycling excreta and provide material for research towards better bionutrient circularity.

Overall design specifications:

- Ease in assembly and disassembly incorporated in the design.
- Structure should be easily flattened or components stackable for efficient shipment and storage.
- Single or multi-unit designs encouraged.
- The models should be sketched and then built (up to 1:2 scale).
- Materials will be provided (cardboard, tape) on site but the participants are welcome to bring their own additional supplies, ideally salvaged.
- The suggestion of the materiality for the prototype (what the test design in full scale should be constructed out of) should be a part of the proposal.
- Each stall should contain a toilet seat, a bucket with sawdust* and at least a holder for sanitizer. A sink could be incorporated in each stall or placed in a communal wash area.
- The design should accommodate a "privy" toilet fixture, to be supplied by Separett*.
 <u>Urine separating set Separett Privy 501, regular seat, blue bowl</u>

How it will work (approximately and generally negotiable):

Process:

- Entry is free and open to all.
- Teams of 2-5 participants can team up with colleagues from various department to broaden the approach and expertise.
 - Teams entering the competition must let the organizers know of their intent by 11 April
- The Soil Factory is a spacious studio. Work can be done indoors or out, depending on preference and weather.
- Models should be drafted and then built in approx. 9" to 1:2 scale.

^{*}the exact components or a "starter kit" will be explained further during the design workshop.

- We will be building models from raw materials throughout the day. Models can also be constructed and brought to the Soil Factory at any time prior to 3:30 pm on April 16th.
- A rough idea of the materiality for the future full-scale prototype should be suggested by the authors.
- A panel of judges will choose a winning design, to be announced at 4 pm.
- The Prize: The winning team will be able to spend \$3,000 to build their design from "real" (but still repurposed or recycled) materials.

• Background:

- The Soil Factory Network (SFN) is developing technologies for the safe use of excreta in agriculture. Options include straw-bale farming with pee-based fertigation, and production of fertilizer using pee plus biochar made from poop.
- The SFN has been approached by people involved in large sporting events and similar.
- The winning design may be used for events such as marathons, Cornell graduation, and Burning Man events.

A couple of examples:



