

Higgledy-Piggledy Plenary Lecturers

Written and Presented by May R. Berenbaum
at the

2014 Annual Meeting of the International Society of Chemical Ecology

1. JERROLD MEINWALD, **Chemical ecology's past, present, and possible future**

Higgledy piggledy
Florida bella moths
feed upon rattlebox
(toxic as hell)

Packing their glands with hydroxydanaidal
This species thinks that recycling is swell.

2. BONNIE BASSLER, **Tiny conspiracies: cell-to-cell communication in bacteria**

Higgledy piggledy
Vibrio harveyi
Life as a single bacterium sucks.

Making your signaling autoinducible
means quorum sensing is super de-LUX

3. CATHERINE DULAC, **Molecular, genomic and neuronal bases of pheromonal signaling in mammals**

Jiggery pokery
Little *Mus musculus*
Parenting duties are left to the bride

Now we know knocking out *Trp2C* genes
helps the male mice find their feminine side

4. DANIELLE WHITTAKER, **Silent songs: content and context of avian chemical signals**

Higgledy piggledy
Junco hyemalis
fathers a chick and won't bother to rear it

Wooing a mate with his 2-tetradecanone
Male junco courtship song
"Smells like preen spirit"

5. SYLVIA ANTON, **Modulation of insect olfaction: from neurons to behavior**

Higgledy piggledy
Male cotton leafworm moths aren't like humans (that's not a surprise)

Sex signals augment their
macroglomerulus;
that's not in men what
increases in size.

6. MURRAY ISMAN, **Mixtures matter, and other things I've learned about insect-plant chemical interactions**

Higgledy piggedy
Two-spotted spider mites
due to resistance are
quite pestilential

Not so when faced with a
bioinsecticide
Rosemary oil control's
really essential

7. ROBERT RAGUSO, **Landscapes of linalool: evolution of a volatile floral signal**

Higgledy piggedy
O. harringtonii
Cross-pollination is
really a chore

Offering visitors
Linalyl alcohol
They don't even ask for
IDs at the door