

# The Future of Global Beekeeping: Facing New Challenges

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Gilles Ratiá's Points Noted:

Constantly Adapting  
“Slow Beekeeping”  
High Tech Beekeeping 2.0  
Cheap, Artificial Honey

What I learned at Apimondia 46

# Machine Language, Artificial Intelligence (AI), Molecular Testing

- Using AI to look at the honey bee microbiome
- Using information techniques in genomics
  - Africanized Honey Bee Identification
  - Varroa and Viral Tolerance/Resistance
- GMOs, Auto (Drone) Pollination, Artificial Honey (Future of Testing)
- Using AI to diagnose colonies using sound
  - Standardized data collection (no human input?)
  - <https://beehealth.guru>
  - Citizen Science project
  - Huge amounts of information to analyze
  - Increasing computer power: facial recognition and smart phone data
  - Poster P.19.505 12 September