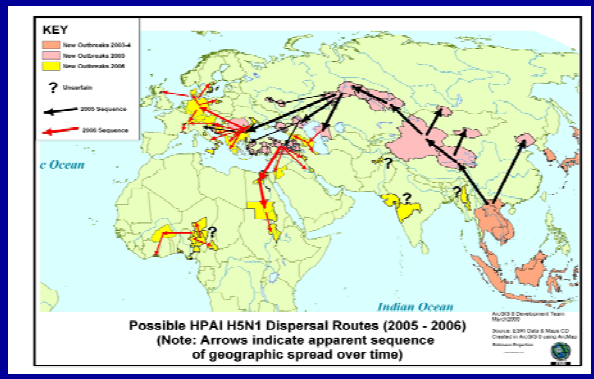
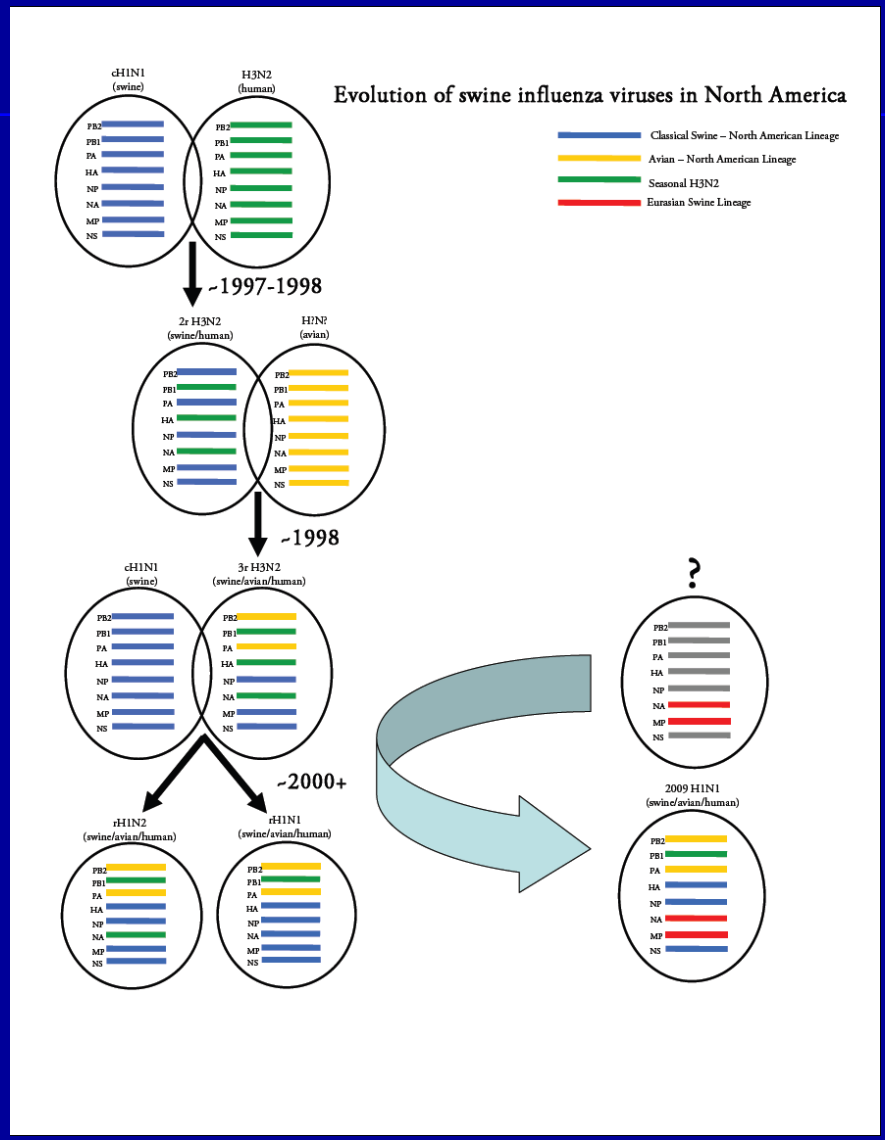
“One Flu”

Development of a permanent influenza gene pool observatory to monitor and understand how influenzavirus genes move across species and continents for improved human and animal health

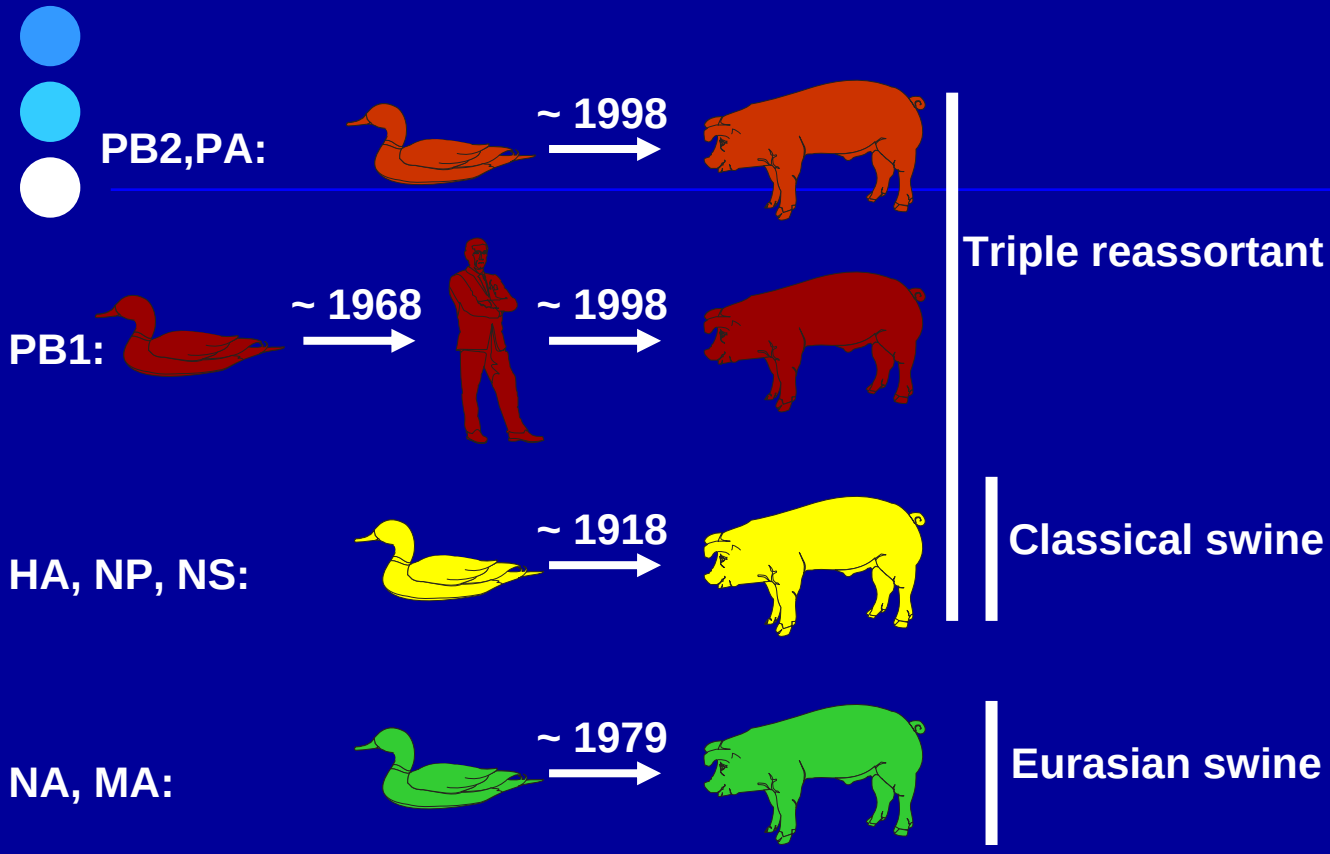


Influenzaviruses cannot be put in boxes

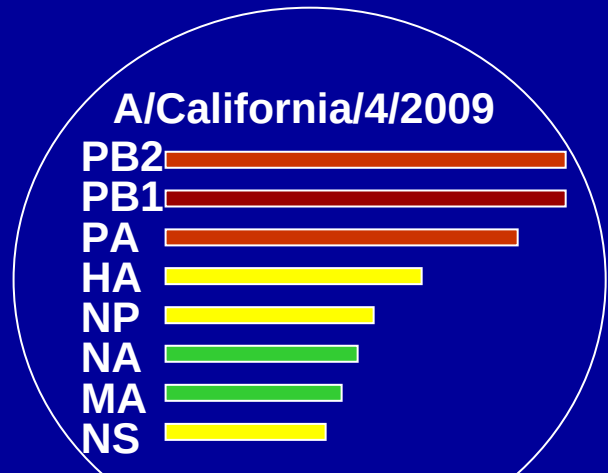


naoH1N1

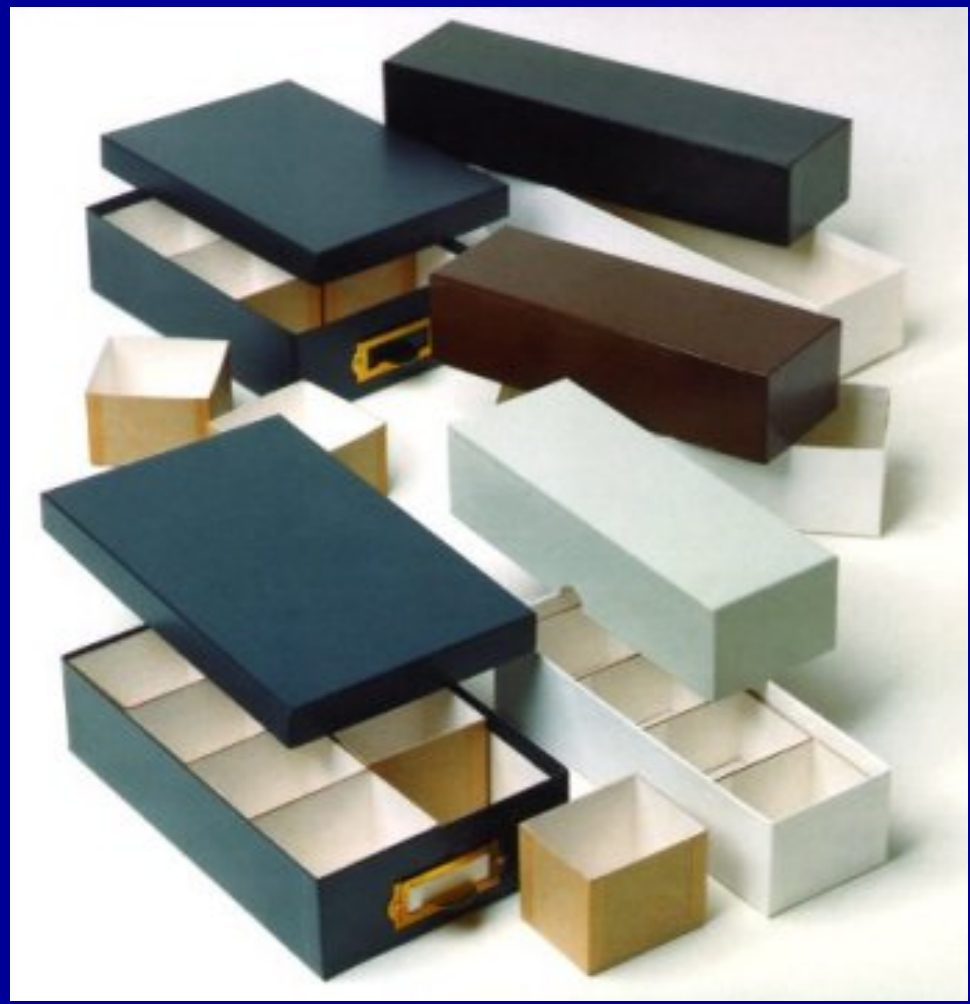
- genes from viruses established in 3 species
- Originating from two hemispheres

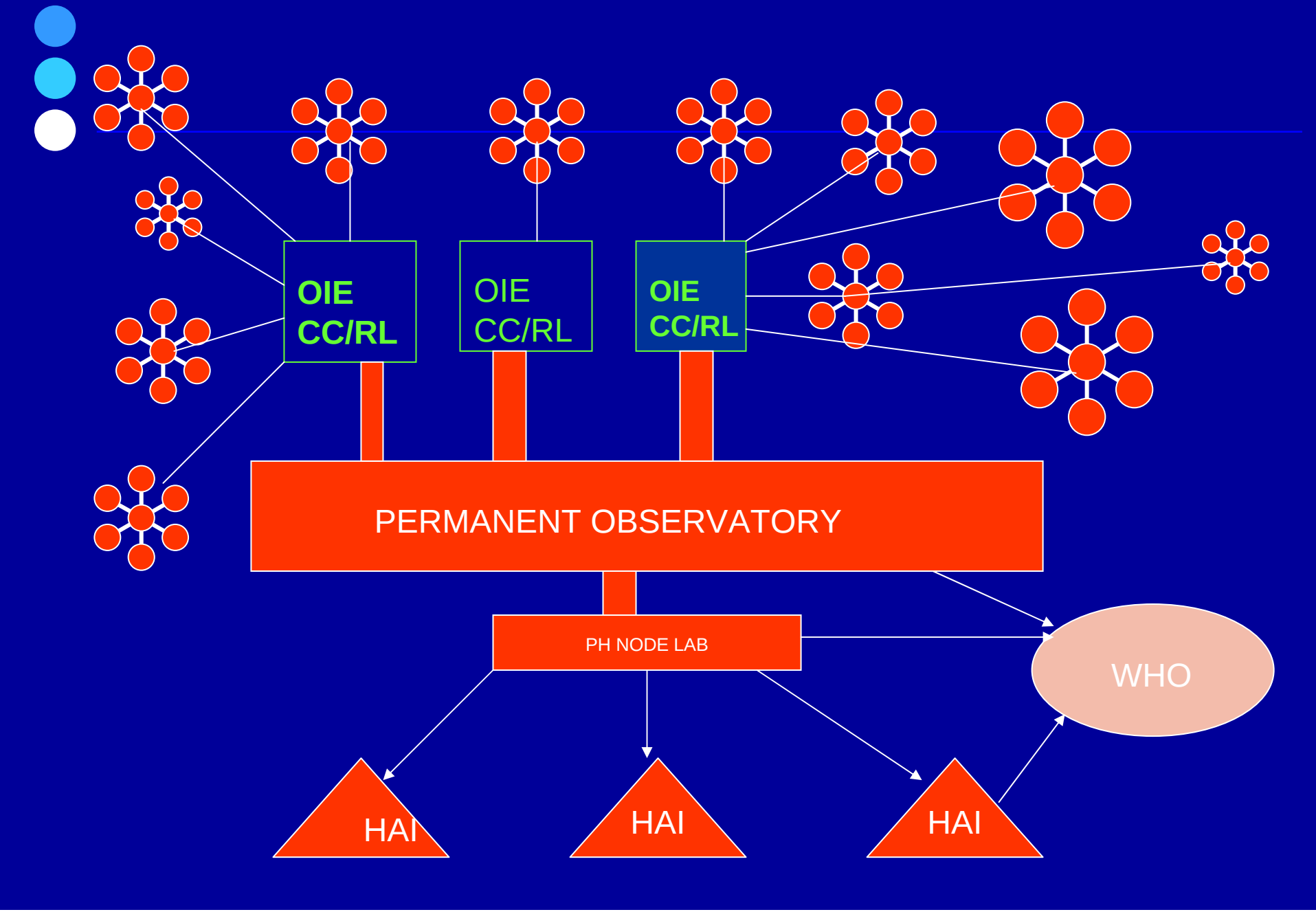


Courtesy of Ron Fouchier



Is this the right way to approach influenzavirus infections?





Influenza gene pool analysis

List of Participants

OIE CC's

Fao Regional Networks
- NVRI Vom Nigeria
- Dakar Senegal
- Gaborone, Botswana
- OVI, RSA
- Kabete, Kenya
- Ethiopia

OIE Reference labs
- VLA, UK
- FLI, DE
- Harbin, China
- Hokkaido, Japan
- Bhopal, India
- USDA, Ames, Iowa USA
- CFIA Canada

PH labs CDC Influenza Division

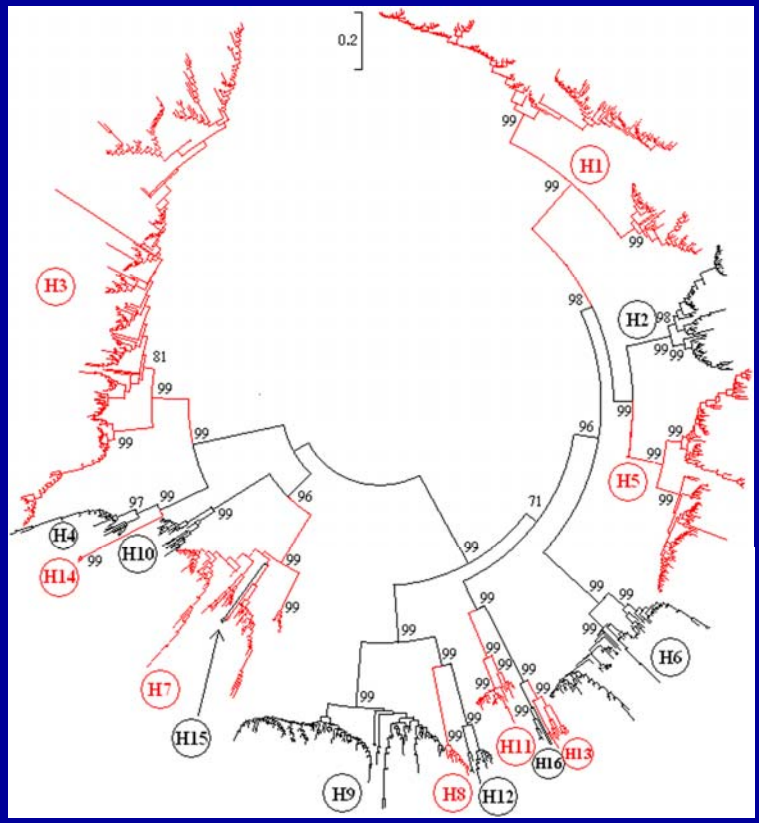
USDA APHIS/SERPL

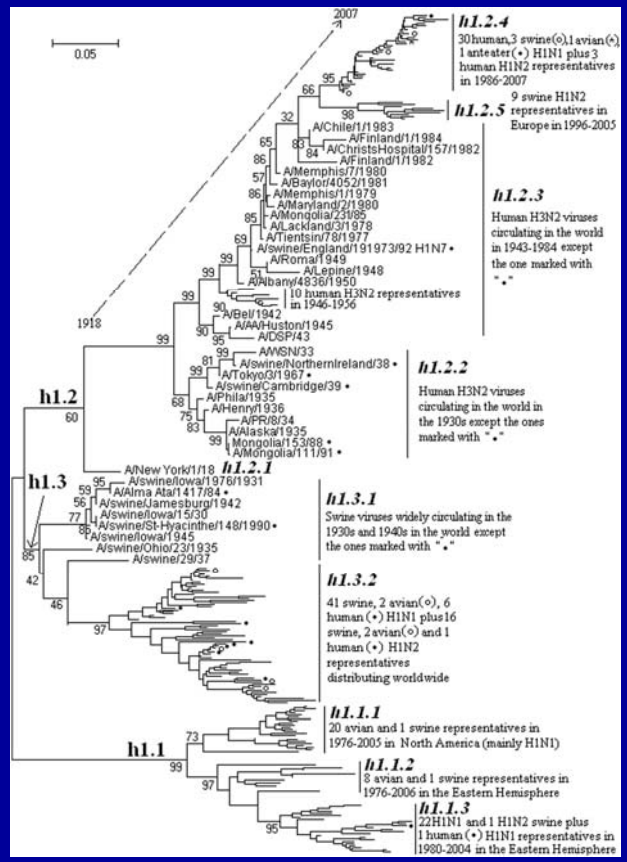
OIE Twinned labs
- ARRIAH, Russia
- Censa, Cuba
- NVRL Egypt
- Islamabad Pakistan
- NVRI Qatar

Other
- Uni Florida (Canine –Feline)
- Uni Kentucky (Equine)
- Uni Minnesota (swine)
- Hong Kong University
- EU EPIZONE Network
- Uni Maryland *

Panorama Phylogenetic Diversity and Distribution of Type A Influenza Virus

Liu S, Ji K, Chen J, Tai D, Jiang W, et al. 2009 Panorama Phylogenetic Diversity and Distribution of Type A Influenza Virus. PLoS ONE 4(3): e5022. doi:10.1371/journal.pone.0005022





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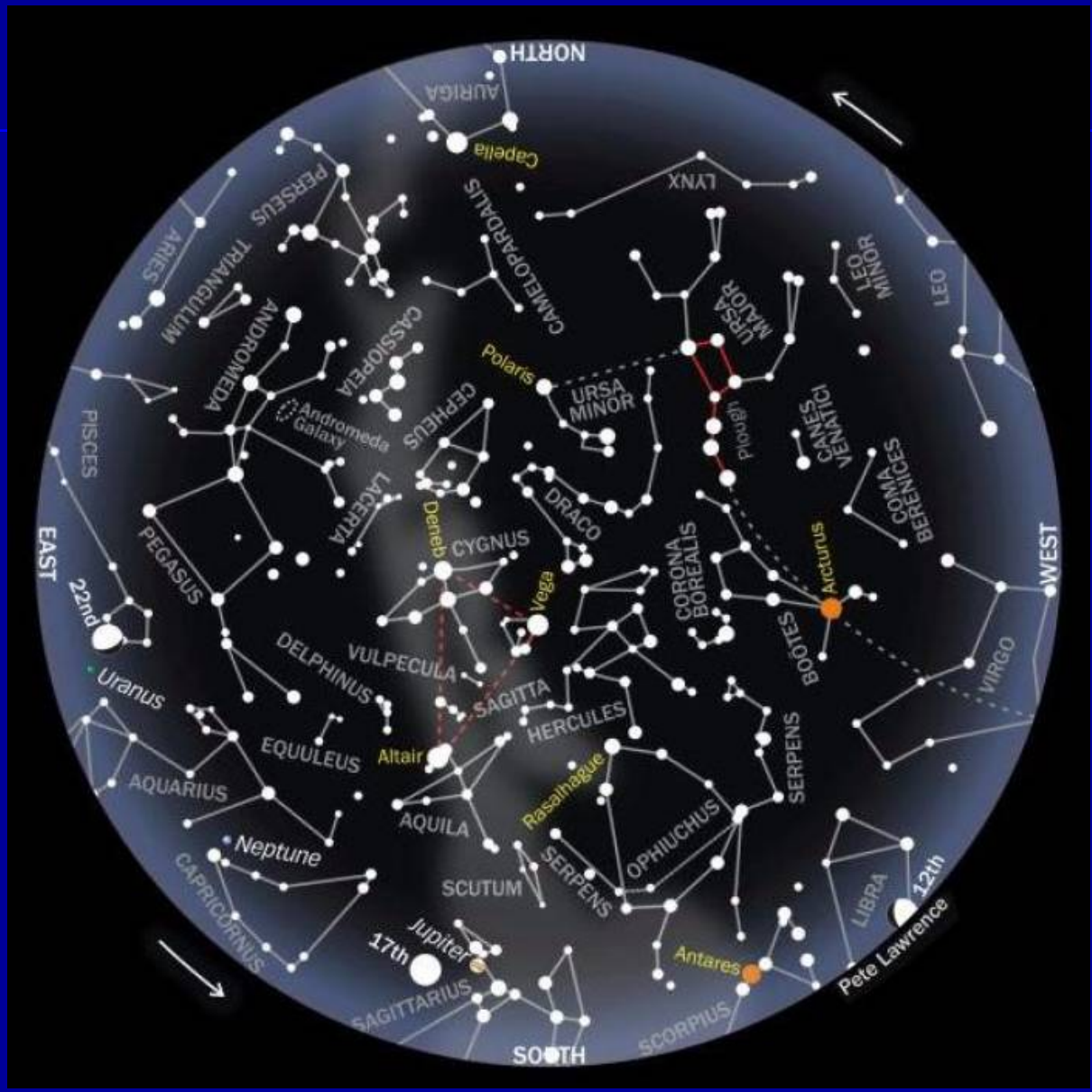
NORTH
AURIGA
Capella
LYNX
PERSEUS
ARIES
TRIANGULUM
ANDROMEDA
CASSIOPEIA
CAMELOPARDALIS
URSA MAJOR
LEO MINOR
LEO
Polaris
URSA MINOR
Andromeda Galaxy
CEPHEUS
Phecda
CANES VENATICI
COMA BERENICES
PISCES
LACERTA
DRACO
CYGNUS
CORONA BOREALIS
Arcturus
EAST
WEST
PEGASUS
22nd
Vega
BÖTES
VIRGO
DELPHINUS
VULPECULA
SAGITTA
HERCULES
Uranus
EQUULEUS
Altair
SERPENS
AQUARIUS
Rasalhague
AQUILA
OPHIUCHUS
Neptune
SERPENS
SCUTUM
LIBRA
12th
CAPRICORNUS
Jupiter
17th
Antares
Pete Lawrence
SAGITTARIUS
SCORPIUS
SOUTH