



Protein Allergenicity Technical Committee (PATC)

New Methods Workshop
Nice, France
October 2007



PATC Mission

To advance the scientific understanding of the relevant parameters defining allergenic proteins as well as encourage the development of reliable and accurate methodologies for characterizing the allergenic potential of novel proteins.



PATC Objectives

- Identify limitations in understanding of what makes a protein allergenic.
- Establish processes useful in a weight-of-evidence approach to the evaluation of novel proteins expressed in biotech products.
- Develop scientific uniformity for these evaluations.



Potential Health Risks Relative to Allergenicity Associated with the Crops Enhanced via Biotechnology

- Transfer an existing allergen or cross-reactive protein into another crop
- Alteration or quantitative increase of endogenous (existing) allergens
- Creation of food allergens *de novo*



Approaches Taken to Fulfill Mission

- Conduct workshops with experts from government, academia, and industry.
- Basic research to evaluate utility of *in vivo* methods.
- Development of common approaches for *in vitro* assessment.
- Outreach activities to update state-of- the-art for allergenicity evaluations.

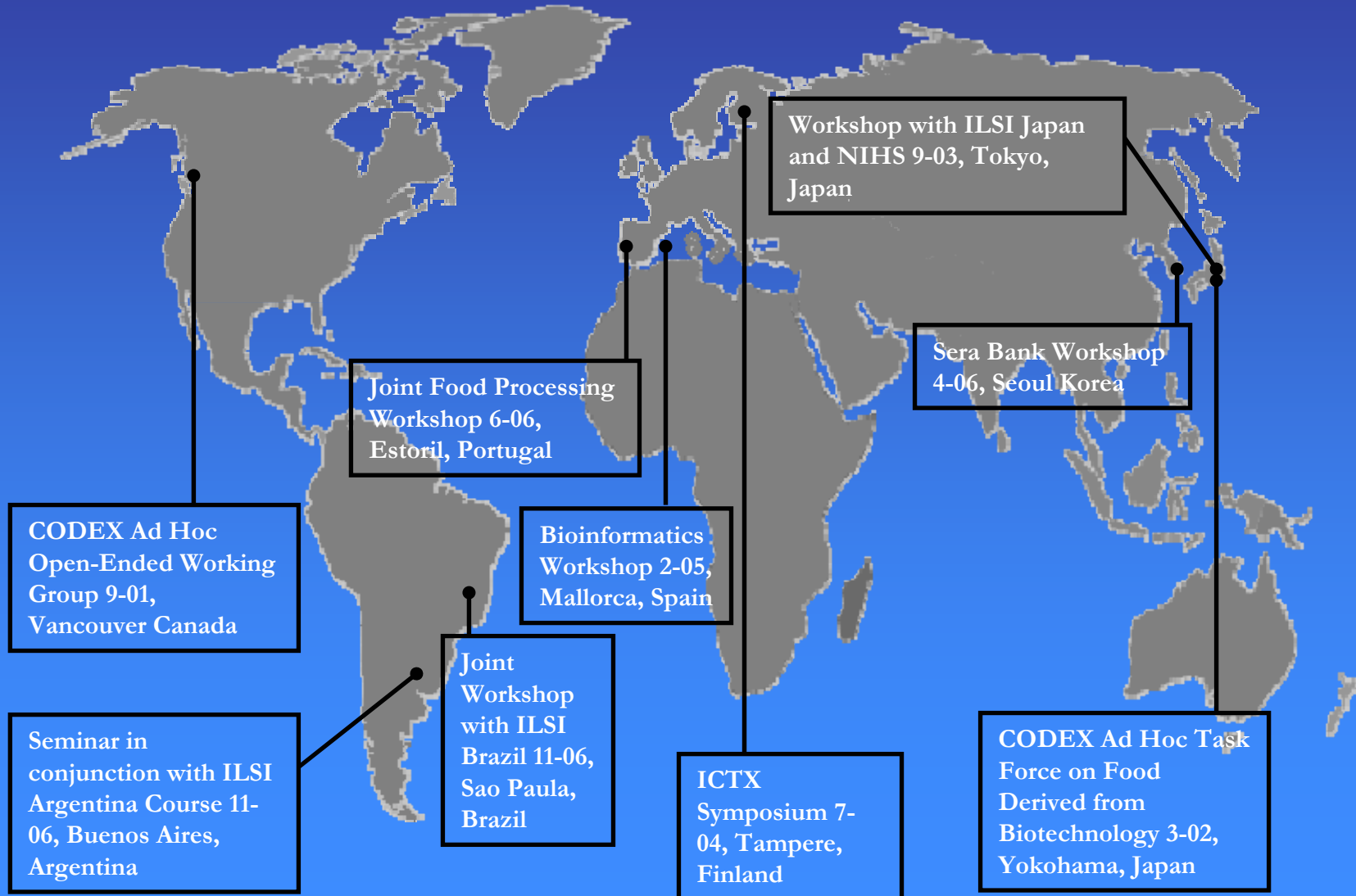


PATC Areas of Interest

- Biochemical Parameters associated with allergenic proteins
- Sequence Homology / Bioinformatics Evaluations
- Animal Models for Predicting Human Food Allergy
- Development of a Sera Bank



PATC International Outreach (2001-2006)





Workshop goals

- Review Current Methods
- Discuss the utility of new bioinformatics approaches
- Discuss the application of Proteomics in allergenicity assessments
- Discuss in vitro methods
- Review utility of animal models