EAACI, Amsterdam June 11-16, 2004

Year In Review – "Allergens", Martin D. Chapman, PhD

References

1. Kaiser, L, Gronlund H, Sandalova T, Ljunggren HG, van Hage-Hamsten M, Achour A, Schneider G. The crystal structure of the major cat allergen Fel d 1, a member of the Secretoglobin family. *J Biol Chem* 2003, 278:37730-37735.

2. Kaiser L, Gronlund H, Sandalova, Ljunggren HG, Achour A, Schneider G, van Hage-Hamsten M. Three-dimensional structure of Fel d 1, the major allergen in cat. *Int Arch Allergy Immunol* 2003, 132:25-26.

3. Smith W, Butler AJL, Hazell LA, Chapman MD, Pomes A and Thomas WR. Fel d 4, a cat lipocalin allergen. *Clin Exp Allergy* 2004, In Press.

4. Spangfort MD, Mirza O, Ipsen H, Joost van Neerven RJ, Gajhede M, and Larsen JN. Dominating IgE-binding epitope of Bet v 1, the major allergen of birch pollen, characterized by x-ray crystallography and site-directed mutagenesis. *J Immunol* 2003, 171:3084-3090.

5. Swoboda I, Grote M, Verdino P, Keller W, Singh MB, De Weerd N, Sperr WR, Valent P, Balic N, Reichelt R, Suck R, Fiebig H, Valenta R, and Spitzauer S. Molecular characterization of polygalacturonases as grass pollen-specific marker allergens: Expulsion from pollen via submicronic respirable particles. *J Immunol* 2004, 172:6490-6500.

6. Sakata Y, Arima K, Takai T, Sakurai W, Masumoto K, Yuyama N, Suminami Y, Kishi F, Yamashita T, Kato T, Ogawa H, Fujimoto K, Matsuo Y, Sugita Y, and Izuhara K. The Squamous cell carcinoma antigen 2 inhibits the cysteine proteinase activity of a major mite allergen, Der p 1. *J Biol Chem* 2004, 279:5081-5087.

7. Sehgal N, Ainsworth S, Dafforn T, Custovic A, Woodcock A,, Protease Activity of Der p 1: Cysteine, Serine or Both? *J Allergy Clin Immunol*, 2004 113:S336 Abstract.

8. Ling EM, Smith T, Nguyen XD, Pridgeon C, Dallman M, Arbery J, Carr VA and Robinson DS. Relation of CD4+CD25+ regulatory T-cell suppression of allergen-driven T-cell activation to atopic status and expression of allergic disease. *Lancet* 2004, 363:608-15.

9. Runa F, William A, Oldfield LG, Higashi N, Larche M, and Kay B. Late asthmatic reactions induced by inhalation of allergen-derived T cell peptides. *Am J Respir Crit Care Med* 2004, 169:20-26.

10. Reefer AJ, Carneiro RM, Custis NJ, Platts-Mills TAE, Sung SSJ, Hammer J, and Woodfolk JA. A role for IL-10 mediated HLA-DR7-restricted T cell-dependent events in development of the modified Th2 response to cat allergen. *J Immuno*l 2004, 172:2763-2772.

11. Breiteneder H, and Radauer C. A classification of plant food allergens. *J Allergy Clin Immunol* 2004, 113:821-30.

12. Koppelman SJ, Wensing M, Ertmann M, Knulst AC, and Knol EF. Relevance of Ara h1, Ara h2 and Ara h3 in peanut-allergic patients, as determined by immunoglobulin E Western blotting, basophil-histamine release and intracutaneous testing: Ara h2 is the most important peanut allergen. *Clin Exp Allergy* 2004, 34:583-590.

13. Shreffler WG, Beyer K, Chu TH, Burks AW, and Sampson HA. Microarray immunoassay: Association of clinical history, in vitro IgE function, and heterogeneity of allergenic peanut epitopes. *J Allergy Clin Immunol* 2004, 113:776-82.

14. Perry TT, Conover-Walker MK, Pomes A, Chapman MD, and Wood R. Distribution of peanut allergen in the environment. *J Allergy Clin Immunol* 2004, 113:973-6.

15. Sears MR, Greene JM, Willan AR, Wiecek EM, Taylor DR, Flannery EM, Cowan JO, Herbison GP, Silva PA, and Poulton R. A longitudinal, population-based, cohort study of childhood asthma followed to adulthood. *N Engl J Med* 2003, 349:1414-1475.

16. Terreehorst I, Hak E, Oosing AJ, Tempels-Pavlica Z, de Monchy JGR, Bruijnzeel-Koomen CAFM, Aalberse RC, and van Wijk RG. Evaluation of impermeable covers for bedding in patients with allergic rhinitis. *N Engl J Med* 2003, 349:237-246.

17. Woodcock A, Forster L, Matthews E, Martin J, Letley L, Vickers M, Britton J, Strachan D, Howarth P, Altmann D, Frost C, and Custovic A, and the Medical Research Council General Practice Research Framework. Control of exposure to mite allergen and allergen-impermeable bed covers for adults with asthma. *N Engl J Med* 2003, 349:225-236.

Table 4

Online Allergen Databases

Database	Locator
WHO/IUIS Allergen Nomenclature	**www.allergen.org***
Structural database of allergenic proteins (SDAP)	http://fermi.utmb.edu/SDAP
Food Allergy Research and Resource Program (Farrp)	www.allergenonline.com
Protall	www.ifr.bbsrc.ac.uk/protall
ALLERbase	www.dadamo.com/allerbase
Allergome	www.allergome.org
Central Science Laboratory (York, UK)	http://www.csl.gov.uk/allergen/

* Official website of the WHO/IUIS Sub-committee on allergen nomenclature.

This Table is reproduced from a chapter on Allergen Nomenclature by Martin D. Chapman, which provides a historic overview of the development of the WHO/IUIS Allergen Nomenclature, together with a review of how the system has been revised and is currently being used. Permission to reproduce the chapter was provided by Marcel Dekker Inc. (http://www.dekker.com/index.jsp.). The chapter is reprinted from Allergens and Allergen Immunotherapy, 3rd Edition, Edited by RF Lockey, SC Bukantz & J Bousquet, Marcel Dekker, 2004, pp51-64, by courtesy of Marcel Dekker, Inc.