

Stanford



R. Sharon Chinthrajah

- Clinical Associate Professor, Medicine
- Clinical Associate Professor, Pediatrics - Immunology and Allergy

CLINICAL OFFICES

- **Pulmonary and Critical Care**

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Bio

CLINICAL FOCUS

- Food Allergy
- Asthma
- Allergy and Immunology

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Medicine
- Clinical Associate Professor, Pediatrics - Immunology and Allergy
- Member, Maternal & Child Health Research Institute (MCHRI)

PROFESSIONAL EDUCATION

- Residency: California Pacific Medical Center Dept of Medicine (2008) CA
- Board Certification: Allergy and Immunology, American Board of Internal Medicine (2014)
- Fellowship: Boston Medical Center (2013) MA
- Board Certification: Critical Care Medicine, American Board of Internal Medicine (2012)
- Fellowship: Boston Medical Center (2011) MA
- Board Certification: Pulmonary Disease, American Board of Internal Medicine (2010)
- Medical Education: Drexel University College of Medicine (2004) PA

Research & Scholarship

CLINICAL TRIALS

- Clinical Study Using Biologics to Improve Multi OIT Outcomes, Recruiting
- Food Allergy Registry at a Single Site, Recruiting
- Omalizumab as Monotherapy and as Adjunct Therapy to Multi-Allergen OIT in Food Allergic Participants, Recruiting

- Safety Study of Viaskin Peanut to Treat Peanut Allergy, Not Recruiting

Publications

PUBLICATIONS

- **RNA-Seq of Gastrointestinal Biopsies During Oral Immunotherapy Reveals Changes in IgA Pathway**
Zhang, W., Dhondalay, G., Hoh, R., Tupa, D., Bunning, B., Fernandez-Becker, N., Kambham, N., Boyd, S., Galli, S., Andorf, S., Manohar, M., Chinthrajah, S., Nadeau, et al
MOSBY-ELSEVIER.2020: AB132
- **A Phase 2 Study of Multi Oral Immunotherapy in Multi Food Allergic Patients to Test Immune Markers after Minimum Maintenance Dose using Xolair**
Sindher, S., Kumar, D., Purington, N., Tupa, D., Long, A., Cao, S., Woch, M., Tan, T., Lloret, M., Chinthrajah, S., Nadeau, K.
MOSBY-ELSEVIER.2020: AB135
- **Quality Of Life in Patients with Food Allergy: A Systematic Review and Meta-Analysis of interventions Food Allergy Diagnosis and Immunotherapy Studies**
Cao, S., Borro, M., Sindher, S., Tupa, D., Long, A., Chinthrajah, S., Nadeau, K., Alonzi, S.
MOSBY-ELSEVIER.2020: AB245
- **The benefits of playing interactive games on virtual reality headsets during procedures in food allergy clinical trials**
Alonzi, S., Parikh, K., Varadharajulu, S., Chandra, S., Cao, S., Texeira, Z., Sindher, S., Nadeau, K., Chinthrajah, S.
MOSBY-ELSEVIER.2020: AB147
- **Skin TEWL results show significant improvements with Trilipid emollient compared to controls in infants and young children**
Nadeau, K., Sindher, S., Berdyshev, E., Shojinaga, M., Alkotob, S., Alonzi, S., Varadharajulu, S., Chandra, S., Chinthrajah, S., Brough, H., Chan, S., Lack, G., Leung, et al
MOSBY-ELSEVIER.2020: AB240
- **Perceived Burden of Treatment and Quality of Life in Long-Term Follow Up after Oral Immunotherapy in Food Allergic Patients**
Collins, W., Raeber, O., Tupa, D., Cao, S., Nadeau, K., Sindher, S., Chinthrajah, S.
MOSBY-ELSEVIER.2020: AB147
- **Protein Composition Changes in Manufactured *Penaeus aztecus* Shrimp Powder**
Chinthrajah, S., Johansson, J., Woch, M., Conn, T., Chen, E., Long, A., Lyu, S., Kumar, D., Sindher, S., Nadeau, K.
MOSBY-ELSEVIER.2020: AB226
- **Sustained outcomes in oral immunotherapy for peanut allergy (POISED study): a large, randomised, double-blind, placebo-controlled, phase 2 study**
Chinthrajah, S., Purington, N., Andorf, S., Long, A., O'Laughlin, K., Lyu, S., Manohar, M., Boyd, S., Tibshirani, R., Maecker, H., Mukai, K., Tsai, M., Desai, et al
MOSBY-ELSEVIER.2020: AB181
- **Dose-related Allergic Reactions Decrease Over Time During Peanut Oral Immunotherapy in a Large, Randomized, Double-blind, Placebo-controlled, Phase 2 Study**
Long, A., Purington, N., Andorf, S., O'Laughlin, K., Lyu, S., Sindher, S., Manohar, M., Boyd, S., Tibshirani, R., Maecker, H., Mukai, K., Tsai, M., Desai, et al
MOSBY-ELSEVIER.2020: AB134
- **Peanut oral immunotherapy induces gastrointestinal eosinophilia in a longitudinal randomized controlled trial**
Wright, B., Fernandez-Becker, N., Kambham, N., Purington, N., Cao, S., Tupa, D., Zhang, W., Rank, M., Kita, H., Katzka, D., Shim, K., Bunning, B., Doyle, et al
MOSBY-ELSEVIER.2020: AB84
- **Th2A and Th17 cell frequencies and regulatory markers as follow-up biomarker candidates for successful multifood oral immunotherapy.** *Allergy*
Luce, S., Chinthrajah, S., Lyu, S. C., Nadeau, K., Mascarell, L.
2020
- **Legends of Allergy: Stephen J. Galli** *ALLERGY*
Tsai, M., Chinthrajah, S., Nadeau, K. C.
2020; 75 (1): 243–45
- **Origins and clonal convergence of gastrointestinal IgE+ B cells in human peanut allergy.** *Science immunology*
Hoh, R. A., Joshi, S. A., Lee, J. Y., Martin, B. A., Varma, S., Kwok, S., Nielsen, S. C., Nejad, P., Haraguchi, E., Dixit, P. S., Shutthanandan, S. V., Roskin, K. M., Zhang, et al

2020; 5 (45)

- **New Developments in Non-allergen-specific Therapy for the Treatment of Food Allergy.** *Current allergy and asthma reports*
Long, A., Borro, M., Sampath, V., Chinthrajah, R. S.
2020; 20 (1): 3
- **Trends in egg specific immunoglobulin levels during natural tolerance and oral immunotherapy.** *Allergy*
Andorf, S., Bunning, B., Tupa, D., Cao, S., Long, A. J., Borres, M. P., Galli, S. J., Chinthrajah, R. S., Nadeau, K. C.
2019
- **Phase 2a randomized, placebo-controlled study of anti-IL-33 in peanut allergy.** *JCI insight*
Chinthrajah, S., Cao, S., Liu, C., Lyu, S., Sindher, S. B., Long, A., Sampath, V., Petroni, D., Londei, M., Nadeau, K. C.
2019; 4 (22)
- **Conflicting verdicts on peanut OIT from the ICER and FDA Advisory Committee; where do we go from here?** *The Journal of allergy and clinical immunology*
Eiwegger, T., Anagnostou, K., Arasi, S., Begin, P., Ben-Shoshan, M., Beyer, K., Blumchen, K., Brough, H., Caubet, J., Chan, E. S., Chen, M., Chinthrajah, S., Davis, et al
2019
- **Legends of Allergy: Stephen J. Galli.** *Allergy*
Tsai, M., Chinthrajah, S., Nadeau, K. C.
2019
- **Effect of Epicutaneous Immunotherapy vs Placebo on Reaction to Peanut Protein Ingestion Among Children With Peanut Allergy: The PEPITES Randomized Clinical Trial.** *JAMA*
Fleischer, D. M., Greenhawt, M., Sussman, G., Begin, P., Nowak-Wegrzyn, A., Petroni, D., Beyer, K., Brown-Whitehorn, T., Hebert, J., Hourihane, J. O., Campbell, D. E., Leonard, S., Chinthrajah, et al
2019
- **A Phase 2 Randomized Controlled Multisite Study Using Omalizumab-facilitated Rapid Desensitization to Test Continued vs Discontinued Dosing in Multifood Allergic Individuals.** *EClinicalMedicine*
Andorf, S., Purington, N., Kumar, D., Long, A., O'Laughlin, K. L., Sicherer, S., Sampson, H., Cianferoni, A., Whitehorn, T. B., Petroni, D., Makhija, M., Robison, R. G., Lierl, et al
2019; 7: 27–38
- **ICER report for peanut OIT comes up short.** *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*
Eiwegger, T., Anagnostou, K., Arasi, S., Bégin, P., Ben-Shoshan, M., Beyer, K., Blumchen, K., Brough, H., Caubet, J. C., Chan, E. S., Chinthrajah, S., Davis, C. M., Roches, et al
2019
- **Sustained Successful Peanut Oral Immunotherapy Associated with Low Basophil Activation and Peanut-Specific IgE.** *The Journal of allergy and clinical immunology*
Tsai, M., Mukai, K., Chinthrajah, R. S., Nadeau, K. C., Galli, S. J.
2019
- **Sustained outcomes in oral immunotherapy for peanut allergy (POISED study): a large, randomised, double-blind, placebo-controlled, phase 2 study.** *Lancet (London, England)*
Chinthrajah, R. S., Purington, N., Andorf, S., Long, A., O'Laughlin, K. L., Lyu, S. C., Manohar, M., Boyd, S. D., Tibshirani, R., Maecker, H., Plaut, M., Mukai, K., Tsai, et al
2019
- **Isotype-specific agglutination-PCR (ISAP): Asensitive and multiplex method for measuring allergen-specific IgE.** *The Journal of allergy and clinical immunology*
Tsai, C., Mukai, K., Robinson, P. V., Gray, M. A., Waschmann, M. B., Lyu, S., Tsai, M., Chinthrajah, R. S., Nadeau, K. C., Bertozzi, C. R., Galli, S. J.
2018; 141 (5): 1901
- **Isotype-specific agglutination-PCR (ISAP): A sensitive and multiplex method for measuring allergen-specific IgE** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*
Tsai, C., Mukai, K., Robinson, P. V., Gray, M. A., Waschmann, M. B., Lyu, S., Tsai, M., Chinthrajah, R. S., Nadeau, K. C., Bertozzi, C. R., Galli, S. J.
2018; 141 (5): 1901+

- **Development of a tool predicting severity of allergic reaction during peanut challenge.** *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*
Chinthrajah, R. S., Purington, N., Andorf, S., Rosa, J. S., Mukai, K., Hamilton, R., Smith, B. M., Gupta, R., Galli, S. J., Desai, M., Nadeau, K. C.
2018
- **High dimensional immune biomarkers demonstrate differences in phenotypes and endotypes in food allergy and asthma.** *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*
Chinthrajah, R. S., Purington, N., Sampath, V., Andorf, S., Manohar, M., Prunicki, M., Zhou, X., Tupa, D., Nadeau, K. C.
2018
- **Epigenetic Changes in Immune Cells Following Successful Desensitization with Multi-Food Allergen Oral Immunotherapy**
Chinthrajah, S., Andorf, S., Manohar, M., Maecker, H., Tsai, M., Galli, S., Nadeau, K.
SPRINGER/PLENUM PUBLISHERS.2018: 358–59
- **Anti-IgE treatment with oral immunotherapy in multifold allergic participants: a double-blind, randomised, controlled trial** *LANCET GASTROENTEROLOGY & HEPATOLOGY*
Andorf, S., Purington, N., Block, W. M., Long, A. J., Tupa, D., Brittain, E., Spergel, A., Desai, M., Galli, S. J., Nadeau, K. C., Chinthrajah, R.
2018; 3 (2): 85–94
- **Changes in Binding Patterns of Cashew-Specific IgE and IgG4 Over the Course of Oral Immunotherapy with Omalizumab**
Stankey, C. T., Andorf, S., Tetteh, A., Chinthrajah, S., Nadeau, K. C.
MOSBY-ELSEVIER.2018: AB246
- **Peanut-specific type 1 regulatory T cells induced in vitro from allergic subjects are functionally impaired** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*
Pellerin, L., Jenks, J., Chinthrajah, S., Dominguez, T., Block, W., Zhou, X., Noshirvan, A., Gregori, S., Roncarolo, M., Nadeau, K., Bacchetta, R.
2018; 141 (1): 202–+
- **Heterogeneity of Ara h Component-Specific CD4 T Cell Responses in Peanut-Allergic Subjects.** *Frontiers in immunology*
Renand, A., Farrington, M., Whalen, E., Wambre, E., Bajzik, V., Chinthrajah, S., Nadeau, K. C., Kwok, W. W.
2018; 9: 1408
- **Eliciting Dose and Safety Outcomes From a Large Dataset of Standardized Multiple Food Challenges.** *Frontiers in immunology*
Purington, N., Chinthrajah, R. S., Long, A., Sindher, S., Andorf, S., O'Laughlin, K., Woch, M. A., Scheiber, A., Assa'ad, A., Pongratic, J., Spergel, J. M., Tam, J., Tilles, et al
2018; 9: 2057
- **Analysis of a Large Standardized Food Challenge Data Set to Determine Predictors of Positive Outcome Across Multiple Allergens.** *Frontiers in immunology*
Sindher, S., Long, A. J., Purington, N., Chollet, M., Slatkin, S., Andorf, S., Tupa, D., Kumar, D., Woch, M. A., O'Laughlin, K. L., Assaad, A., Pongratic, J., Spergel, et al
2018; 9: 2689
- **Baseline Gastrointestinal Eosinophilia Is Common in Oral Immunotherapy Subjects With IgE-Mediated Peanut Allergy.** *Frontiers in immunology*
Wright, B. L., Fernandez-Becker, N. Q., Kambham, N., Purington, N., Tupa, D., Zhang, W., Rank, M. A., Kita, H., Shim, K. P., Bunning, B. J., Doyle, A. D., Jacobsen, E. A., Boyd, et al
2018; 9: 2624
- **Observational long-term follow-up study of rapid food oral immunotherapy with omalizumab** *ALLERGY ASTHMA AND CLINICAL IMMUNOLOGY*
Andorf, S., Manohar, M., Dominguez, T., Block, W., Tupa, D., Kshirsagar, R. A., Sampath, V., Chinthrajah, R., Nadeau, K. C.
2017; 13: 51
- **Feasibility of sustained response through long-term dosing in food allergy immunotherapy** *ALLERGY ASTHMA AND CLINICAL IMMUNOLOGY*
Andorf, S., Manohar, M., Dominguez, T., Block, W., Tupa, D., Kshirsagar, R. A., Sampath, V., Chinthrajah, R., Nadeau, K. C.
2017; 13: 52
- **A new fluorescent-avidin-based method for quantifying basophil activation in whole blood** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*
Mukai, K., Chinthrajah, R., Nadeau, K. C., Tsai, M., Gaudenzio, N., Galli, S. J.
2017; 140 (4): 1202–+

- **Association of Clinical Reactivity with Sensitization to Allergen Components in Multifood-Allergic Children.** *journal of allergy and clinical immunology. In practice*
Andorf, S., Borres, M. P., Block, W., Tupa, D., Bollyky, J. B., Sampath, V., Elizur, A., Lidholm, J., Jones, J. E., Galli, S. J., Chinthrajah, R. S., Nadeau, K. C.
2017
- **Assessing basophil activation by using flow cytometry and mass cytometry in blood stored 24 hours before analysis** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*
Mukai, K., Gaudenzio, N., Gupta, S., Vivanco, N., Bendall, S. C., Maecker, H. T., Chinthrajah, R. S., Tsai, M., Nadeau, K. C., Galli, S. J.
2017; 139 (3): 889-?
- **Omalizumab facilitates rapid oral desensitization for peanut allergy** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*
MacGinnitie, A. J., Rachid, R., Gragg, H., Little, S. V., Lakin, P., Cianferoni, A., Heimall, J., Makhija, M., Robison, R., Chinthrajah, R. S., Lee, J., LeBovidge, J., Dominguez, et al
2017; 139 (3): 873-?
- **Assessing basophil activation by using flow cytometry and mass cytometry in blood stored 24 hours before analysis.** *journal of allergy and clinical immunology*
Mukai, K., Gaudenzio, N., Gupta, S., Vivanco, N., Bendall, S. C., Maecker, H. T., Chinthrajah, R. S., Tsai, M., Nadeau, K. C., Galli, S. J.
2016
- **Molecular and cellular mechanisms of food allergy and food tolerance.** *journal of allergy and clinical immunology*
Chinthrajah, R. S., Hernandez, J. D., Boyd, S. D., Galli, S. J., Nadeau, K. C.
2016; 137 (4): 984-997
- **T-Cell Immunophenotyping of Second-Hand Smoke-related Asthma.** *Annals of the American Thoracic Society*
Bauer, R. N., Chinthrajah, R. S., Andorf, S., Hobson, B., Miller, R. L., Nadeau, K. C.
2016; 13: S95-?
- **Successful immunotherapy induces previously unidentified allergen-specific CD4+ T-cell subsets.** *Proceedings of the National Academy of Sciences of the United States of America*
Ryan, J. F., Hovde, R., Glanville, J., Lyu, S., Ji, X., Gupta, S., Tibshirani, R. J., Jay, D. C., Boyd, S. D., Chinthrajah, R. S., Davis, M. M., Galli, S. J., Maecker, et al
2016; 113 (9): E1286-95
- **Diagnosis of Food Allergy** *PEDIATRIC CLINICS OF NORTH AMERICA*
Chinthrajah, R. S., Tupa, D., Prince, B. T., Block, W. M., Rosa, J. S., Singh, A. M., Nadeau, K.
2015; 62 (6): 1393-?
- **Oral immunotherapy for the treatment of food allergy** *HUMAN VACCINES & IMMUNOTHERAPEUTICS*
Begin, P., Chinthrajah, R. S., Nadeau, K. C.
2014; 10 (8): 2295-2302