## DERMATOLOGY TEACHERS EXCHANGE GROUP

4:30-6:30 pm Friday October 14, 2011 Montreax Room, Swissotel, Chicago, IL

All presentations (except for the workshop by Neil Prose) are restricted to 5 min inclusive of electronic set up or malfunction so please load talks into laptop computer before the meeting.

4:30	Welcome	Ponciano Cruz UT Southwestern
4:35	Getting students excited about dermatology: An interactive approach to teaching 3 <sup>rd</sup> year medical students	Gina Chacon, Deborah Sleight, Geraud Plantegenest, Barbara Mathes Michigan St & U Penn
4:40	Evaluation of an online learning curriculum in a dermatology medical student clerkship	E Dybbro, S Cipriano, C Boscardin, K Shinkai, TG Berger UCSF
4:45	Creation of a novel, interdisciplinary, multi- site clerkship: Understanding lupus	Vinod Nambudin, S Girouard, P Schur, RA Vleugels Harvard
4:50	EXCHANGE	
4:55	Short, sweet, and meaningful: Using the modified Cruz Index to assess program quality and track program improvement	Erik Stratman Marshfield Clinic
5:00	Effect of residency training environment on the likelihood dermatology residents will pursue academic careers	Elizabeth Kiracofe, Matthew Zirwas Ohio St
5:05	Dermatopathology education in residency programs	Devika Patel, Tammie Ferringer Geisinger
5:10	EXCHANGE	

5:15	FEATURED WORKSHOP Teaching and evaluating better communication between doctors and patients	Neil Prose Duke
6:00	Value of continuity based-training to patient communication, patient satisfaction, and patient outcomes: Does dermatology fall short?	Sean De Silva, Amit Garg Boston U
6:05	EXCHANGE	
6:10	Teaching dermatology to non-dermatologists: A randomized trial	Rachael Cayce, Paul Bergstresser, Carol Croft UT Southwestern
6:15	Disparities in access to dermatologic care according to insurance type	Lana Alghothani, Stephanie Jacks, Matthew Zirwas Ohio St
6:20	Dermatology elective curriculum: Birdwatching list and travel guide	Deepa Patadia, Eliot Mostow Northeast Ohio
6:25	EXCHANGE	
6:30	Adjourn	

Getting Students Excited about Dermatology: An Interactive Approach to Teaching Third-Year Medical Students

Gina Chacón MD,¹ Deborah Sleight PhD,¹ Geraud Plantegenest MA,¹ Barbara Mathes MD²¹College of Human Medicine, Michigan State University, East Lansing, Michigan; ²Department of Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania

Background: Skin disorders affect up to a third of the population, and 10-15% of general practitioner consultations are skin-related. Common dermatologic diseases are often unrecognized or misdiagnosed by non-dermatologists. The American Academy of Dermatology recommends dermatology instruction in medical school. Unfortunately dermatology teaching faces major issues: shortage of trained faculty, inadequate teaching time, and limited clinic resources. In response to a survey we sent to Internal Medicine faculty in the College of Human Medicine (CHM), 30% said they were uncomfortable managing skin problems, 95% desired more dermatologic knowledge, and many commented there was insufficient teaching during training. Since the university lacks a formal dermatology curriculum and CHM students can do clinical clerkships in seven campuses around the state where teaching by dermatologists is not always available, we designed an interactive curriculum for students doing the Internal Medicine clerkship.

Methods: The curriculum contains seven units. For the pilot test we created a self-paced online audio slide lecture with text and image content and interactive cases, questions and feedback. After the online session the students met as a group with the instructor to review the AAD medical- student core curriculum and to discuss problem-based learning cases. They completed a pre- and a post-test and a satisfaction survey.

Results: All students improved their scores from a pretest average of 33% to a posttest average of 95%. All strongly agreed that self-paced online instruction is an effective way to learn dermatology. They suggested the curriculum include more cases involving diverse ethnic backgrounds and atypical presentations.

Conclusion: This blended, case-based curriculum was effective for teaching basic dermatologic concepts. It encouraged critical thinking and problem solving, and can provide standardized instruction to medical students at clerkship sites around the state.

An evaluation of an online learning curriculum in a dermatology medical student clerkship

Dybbro E, Cipriano S, Boscardin C, Shinkai K, Berger TG. Department of Dermatology, University of California, San Francisco

Background: Based on prior needs assessment, an online dermatology curriculum was developed for medical students. The curriculum was integrated into the 2-week introductory dermatology clerkship at UCSF.

Objective: Qualitative and quantitative evaluation of the online curriculum was performed in the following key areas: knowledge acquisition, usability, and user satisfaction.

Methods: All senior medical students enrolled in the dermatology clerkship over a 5-month period . The online curriculum consisting of 18 modules was a required component of the clerkship for all clerkship students. Knowledge acquisition was tested through a pre-test and post-test, with the post-test serving as the final exam. Test questions were matched to content area and validated by testing control groups (dermatology residents). Usability and user satisfaction were assessed via survey. Presented is an interim analysis of 15 study participants. Presentation at the DTEG meeting will include analysis on a projected 23 participants. We anticipate a total of 51 students will participate in the study by the end of the 5 month study period.

Results: Student scores showed marked improvement with an average pre-test score of 62.3% compared to an average post-test score of 88.2% (p= 1.72E-07). In regards to usability and user satisfaction, post-course survey reported the curriculum modules as engaging and easy to navigate. Furthermore, students assessed the curriculum as being the most valuable as compared to textbook readings, clinic time, and didactic sessions. 100% of student reports strongly supported the continuation of the online curriculum as a component of the clerkship.

Creation of A Novel, Interdisciplinary, Multi-Site Clerkship: "Understanding Lupus"

Vinod Nambudiri<sup>1,4</sup>, MD MBA, Sasha D. Girouard<sup>5</sup>, BA, Peter Schur<sup>1,2</sup>, MD; Ruth Ann Vleugels<sup>3,6</sup>, MD MPH

Brigham and Women's Hospital (BWH) <sup>1</sup>Department of Internal Medicine; <sup>2</sup>Division of Rheumatology, Immunology and Allergy; <sup>3</sup>Department of Dermatology; <sup>4</sup>Harvard Dermatology Residency Training Program; <sup>5</sup>Harvard Medical School; <sup>6</sup>Children's Hospital Boston (CHB) Department of Dermatology, Boston, MA.

Contact: Ruth Ann Vleugels, rvleugels@partners.org, 617-732-4918

Background: Few medical student electives include longitudinal patient care across clinical specialties and environments. Systemic lupus represents an ideal disease process for students to learn from providers across fields, including dermatology, rheumatology, nephrology, and cardiology, in both pediatric and adult patients. Diagnosis and management of lupus rely heavily on basic science and clinical immunology, providing a link to the preclinical curriculum.

Objective: Creation of a rotation for students targeting key competencies:

- -Conduct a thorough history, physical, and systems review covering the complex nature of systemic lupus
- -Recognize physical findings in cutaneous and systemic lupus
- -Counsel patients regarding therapies, side effects, and chronic immunosuppression
- -Describe basic science principles of auto-antibody testing

Methods: Student focus groups identified learning needs and elements lacking in traditional electives. A one-month elective was designed with outpatient care in dermatology, rheumatology and multidisciplinary clinics at BWH and CHB. Inpatient exposure included dermatology and rheumatology consult services. A continuity experience allowed students to attend one patient's multiple specialist visits. Didactics from Dermatology, Rheumatology, and Immunology covered evidence-based medicine and basic sciences. Clinical Immunology Lab time demonstrated serologic and auto-antibody testing methods. Evaluation was based on clinical performance and scholarly project/presentation.

Results: The course "Understanding Lupus: A Multidisciplinary Approach to Systemic Disease" was started in 2009. Course ratings are strongly positive, highlighting unique interdisciplinary, integrated exposure, and continuity experiences.

Conclusions: An interdisciplinary, multi-institution elective rotation presents a model for curricular innovation. As revisiting basic sciences in clinical years is encouraged, this course includes clinically-relevant laboratory medicine.

Short, Sweet, and Meaningful: Using the Modified Cruz Index to Assess Program Quality and Track Program Improvement.

Erik J Stratman MD Marshfield Clinic, Marshfield, WI

The original Cruz Index uses resident feedback to identify top areas for residency program improvement. By using weighted responses, a program can prioritize areas most in need of change, and importantly, track success. The ACGME Common Program Requirements include monitoring and tracking program quality. Residents and faculty must have the opportunity to confidentially evaluate the program in writing at least annually, and the program must use program evaluation results to improve the program. If deficiencies are found, the program should prepare a written plan of action to document initiatives to improve performance in the areas listed. At Marshfield Clinic, we have modified the Cruz Index to include faculty and resident identification of the top 3 program strengths and top 3 most needed improvements, in order of significance. Each individual's responses are assigned a weighted factor, such that the top need is given a higher score than second highest need, etc. Faculty and resident responses are weighted similarly. Free text responses are categorized and clustered, when appropriate, into common themes. Results are graphically depicted, demonstrating faculty-identified and residentidentified program strengths and weaknesses. The sum of these two graphs are totaled to provide a combined program assessment. The program then plans, implements, and documents action items related to needed improvements. This process is repeated at least annually. New graphs are compared with the original, to determine if program quality gaps have been closed. This quality gap closure (delta) is documented, along with the program changes implemented during the interval. The Modified Cruz Index serves as a useful, simple tool for annual program quality assessment that meets the ACGME program requirements.

The Effect of Autonomy Supported Development in Dermatology Residency

Elizabeth Kiracofe, B.A., Case Western Reserve University School of Medicine, Cleveland, Ohio

Anthony Vander Horst, M.A., Educational Policy and Leadership, Ohio State University, Columbus, Ohio

Matthew J. Zirwas, M.D., Assistant Professor, Department of Dermatology, Ohio State University Medical Center, Columbus, Ohio

Background: Although the demand for careers in Dermatology continues to rise, concerns about the lack of motivation among graduating residents to stay in academic dermatology persist. A 2006 study assessed institutionally quantifiable data, but did not factor in psychosocial beliefs of the residents. Our study quantifies resident perceptions about programmatic autonomy support using a highly validated instrument and examines if the level of perceived support correlates with resident desire to purse academics.

Objective: To obtain data from current U.S. Dermatology program residents on perceptions of autonomy support and determine if these perceptions affect the likelihood of residents to choose a career in academic dermatology.

Methods & Results: In August and September 2011, dermatology residency directors were contacted, who emailed their residents an online survey of 24 questions (which will be provided), adopted from Deci's *Learning Climate Questionnaire* with 346 respondents, evenly distributed over 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years (107, 107, and 128, respectively), a 30% response rate.

Resident's perceptions of the autonomy supportiveness of their learning environment correlated with their likelihood of choosing an academic dermatology careers (r=0.285, p<0.001). Autonomy supportiveness did *not* correlate with the likelihood of choosing a career in academics for 1<sup>st</sup> year residents (r= 0.164, p = 0.092), and autonomy supportiveness correlated more strongly with likelihood of choosing a career in academics for  $2^{nd}$  year residents than for  $3^{rd}$  year residents ( $2^{nd}$  r = 0.305, p = 0.001;  $3^{rd}$  r = 0.220, p = 0.013).

Conclusion: We conclude that autonomy supportiveness affects resident's desire to choose academics. As expected, autonomy supportiveness does not correlate with desire to pursue academics for first year residents (who had not been in the program long enough to be influenced). Second year residents are the most strongly influenced by autonomy support, most likely because their choice is almost exclusively based on their perceptions of academics. Third year residents are less strongly influenced by autonomy support, most likely because other factors, such as earning potential, geography, and spousal preferences are playing an increasing role in their career choice.

Dermatopathology Education in Residency Programs.

Devika Patel, MS; Tammie Ferringer, MD. Geisinger Medical Center, Danville, PA.

Background: Dermatopathology (DP) is a fundamental part of dermatology training. The aim of this study was to summarize the current state of DP education in dermatology residency programs at different institutions, from both the resident and program director perspective.

Methods: Surveys were emailed to 114 directors and 342 residents.

Results: 14 directors and 55 residents replied for a response rate of 12.3% and 16.1%, respectively. Most residents favor slide based conferences and glass slide sets for self-study. The favored DP text for residents was Rapini, followed closely by Weedon. Two directors reported no specific DP objectives in their program. 77% of programs require a DP rotation during training. 93% of residents reported at least weekly DP specific conferences; two-thirds of which were associated with reading assignments. Other than in-training exams, 47% of programs do not formally examine the residents' DP skills. The great majority of residents reported no exposure to specimen grossing, tissue processing, DP billing, or lab management. 40% of residents never see their own biopsies or review less than 10%. Per directors and residents, barriers to DP education include limited resident time for DP rotations due to other service commitments, inadequate DP faculty or time for teaching, and inadequate glass study sets. Both groups desire more time on sign-out rotation, more dedicated DP faculty, and more quizzes and unknowns. 82% of residents were satisfied with their DP education while all directors felt the residents were satisfied.

Conclusion: Awareness of barriers to DP education, resident perceptions and learning needs, as well as comparison of various curriculums can assist in identification of opportunities for enhancement in DP curricula to benefit residents in their future careers and improve outcomes on board exams.

Difficult Conversations: An Innovative Approach to Teaching Doctor-Patient Communication to Dermatology Residents

Neil S. Prose, M.D.

**Duke University Medical Center** 

Based on teaching methods developed in a variety of medical disciplines and subspecialties, we have developed a new approach to incorporating communications skills training into the dermatology residency. The 2-3 hour training seminar is divided into three discrete sections. In the first section, residents are asked to describe situations in their own direct experience where communicating with patients and their families have proved difficult. Typical suggestions include: delivering a diagnosis of melanoma, dealing with angry or entitled patients, the "non-compliant" patient. The second part of the seminar (approximately twenty minutes) is didactic, and covers essential skills and techniques in empathic health care communication. The final and major part of the seminar is role-play; residents are given the opportunity to "replay" their difficult conversations in interactions with standardized patients (actors). They are encouraged to use the skills that they have just learned, and are given constructive feedback on their performance.

The Value of Continuity Based Training to Patient Communication, Patient Satisfaction, and Patient Outcomes. Does Dermatology Fall Short?

Sean De Silva, B.S. and Amit Garg, M.D. Department of Dermatology, Boston University School of Medicine, Boston, Massachusetts, USA

Background: The benefits of continuity based training in dermatology to residents and patients, as well as to the professional interpersonal relationship between them, are unknown. As an initial measure, we sought to assess the nature of the longitudinal training experience among dermatology residency programs as well as the attitudes towards continuity training among program directors (PDs) and residents. A sub-section of these questionnaires included content on communication and relationship with patients.

Methods: An 8 item and a 15 item questionnaire were distributed via the APD listserv to dermatology programs and residents, respectively, in AY 10-11.

Sub-Section Results: Thirty-three programs and 179 residents responded to their respective surveys. The median number of continuity clinics (CC) per week among programs was 1. PDs average rating of the value of CCs to training was 8.8 out of 10. Most (76%) residents felt they improved their therapeutic alliance and rapport with patients more so in their CC compared with rotation based clinics. Most (66%) residents felt a greater invested in patient care and outcomes in their CC compared with rotation based clinics, while another 22% felt neutral on this issue.

Discussion: A sub-section of our data indicates that PDs place high value on the continuity training experience. Residents also feel that a longitudinal relationship improves rapport with patients, which also has the potential to positively influence the therapeutic alliance and patient outcomes. However, dermatology residents generally have a significantly limited opportunity to develop longitudinal relationships with patients having chronic disease.

Evidence describing benefits of a longitudinal relationship between dermatology trainees and patients on communication, patient satisfaction and clinical outcomes is lacking. However, data from other disciplines in which residents care for patients having chronic disease indicates that all three of these variables may be improved with an augmented continuity based training structure for dermatology trainees. The most relevant data is briefly presented.

Teaching Dermatology to Non-Dermatologists: A Randomized Trial

Rachael Cayce<sup>a</sup> MD, Paul Bergstresser<sup>a</sup> MD, and Carol Croft<sup>b</sup> MD The University of Texas Southwestern Medical Center <sup>a</sup> Department of Dermatology <sup>b</sup> Department of Internal Medicine

Objective: Given the increasing time and resource constraints facing educators, studies determining the most effective educational methods would allow for better resource utilization. This trial was designed to determine which educational interventions were most effective by answering two specific aims:

- (1) To determine if there is a significant improvement (pre-specified at 20%) in the pre- and post-training scores of individual Internal Medicine residents completing any of three interventions: (a) clinical, (b) didactic, or a (c) combined clinical and didactic curricula.
- (2) To determine if there is a significant difference in the mean improvement in the pre- and post-training scores of the group of Internal Medicine residents completing the combined clinical and didactic curriculum as compared to the group of residents completing either the (a) clinical or (b) didactic curricula.

Design: 36 PGY-2 Internal Medicine Residents were randomized into equal numbers (N=12) to complete four weeks of standardized instruction in any one of the three curricula.

Main Outcome Measures: Performance on the MKSAP-15 at study entry and at completion of each of the three curricula. MKSAP-15 is a standardized exam of Dermatology for Internists.

Results: All randomized participants completed the study. All three curricula demonstrated a significant improvement in the MKSAP-15 scores. The combined didactic and clinical curriculum, however, was not more effective than the other curricula. In fact, the didactic curriculum was the most effective curriculum with a mean improvement of 35% as compared to the clinical and combined clinical and didactic curricula (both achieving a 22% improvement).

Conclusion: This is the first study to directly compare the effectiveness of different methods of dermatology instruction using a standardized assessment tool in a group of non-dermatologists. While all modalities demonstrated an improvement in the examination scores, the didactic curriculum was convincingly more effective than the other curricula. Thus, the greatest impact for non-dermatologists may be achieved utilizing a standardized lecture series.

Disparities in Access to Dermatologic Care According to Insurance Type

Lana Alghothani, BS<sup>1</sup>, Stephanie Jacks, MD<sup>2</sup>, Matthew Zirwas, MD<sup>2</sup>

<sup>1</sup>The Ohio State University College of Medicine, Columbus, OH

<sup>2</sup>Department of Dermatology, The Ohio State University Medical Center. Columbus, OH

Background: In 2008, the Health Tracking Physician Survey revealed that only 53% of all physicians surveyed were willing to accept new Medicaid patients, and another large study from 2003 demonstrated an even lower acceptance rate (32%) among US dermatologists.<sup>1,2</sup> We sought to assess current data on this disparity and determine if there is a difference in Medicaid acceptance between private practice and academic dermatologists.

Methods: Dermatology providers in the state of Ohio were randomized into two groups. Each provider was called by a hypothetical patient to inquire about setting up a self-referred new patient appointment for a changing mole. One group was told the patient had Medicaid and the other group was told the patient had private insurance. We recorded the acceptance rate as well as wait times for each group, and also noted whether the provider was part of an academic or private practice setting.

Results: 204 dermatologists were called, 100 were in the private insurance group and 104 were in the Medicaid group. 91% accepted the private insurance patient, with an average wait time of 30.5 days. 30% accepted the Medicaid patient with an average wait time of 66.4 days. All academic dermatologists accepted Medicaid, but only 17% of the private practice physicians did so.

Conclusion: Academic dermatologists provided the majority of access to care for Medicaid patients, despite making up less than 20% of the dermatologic workforce. This burden of caring for the Medicaid population is likely to affect the ability of academic practices to offer competitive salaries to physicians and to lead to residents not gaining adequate experience caring for patients with private insurance, who are likely to be the primary patient population they are caring for after residency if they pursue private practice.

Dermatology Elective Curriculum: Birdwatching List and Travel Guide

Deepa D. Patadia, M.D. and Eliot N. Mostow, M.D., M.P.H. Northeast Ohio Medical University, Rootstown, OH

Primary care physicians often see patients with dermatologic complaints, but they do not perform as well as dermatologists in the diagnoses of common dermatologic conditions. Dermatologists who teach primary care residents and medical students have the opportunity to help close the clinical practice gap. However, educators face the challenge of teaching residents and students within the time constraints of the training program, while continuing to provide quality patient care. We will discuss a dermatology curriculum that provides an efficient and effective way to teach dermatology to medical students and non-dermatology residents in the setting of a busy, outpatient dermatology practice.