

## **IAS–USA Educational and Informational Effort: 2008 Summary**

### **I. 16<sup>TH</sup> ANNUAL INTERNATIONAL AIDS SOCIETY–USA “IMPROVING THE MANAGEMENT OF HIV DISEASE” COMPREHENSIVE EDUCATIONAL EFFORT: END-OF-YEAR SUMMARY**

The 2008 IAS–USA “*Improving the Management of HIV Disease*” national, multifaceted educational effort (its 16<sup>th</sup> year), had 3 general activity types, which included:

-*Advanced Continuing Medical Education (CME) Courses in HIV Pathogenesis, Antiretrovirals, and Other Selected Issues in HIV Disease Management*: Live, full-day, advanced CME courses, each of which is available online as a CME Webcast and as a podcast

-*Cases on the Web (COW)*: a series of interactive, case-based, internet activities that are available to HIV clinicians worldwide for CME credit

-*Topics in HIV Medicine (THM)*: A peer-reviewed, indexed journal that publishes articles that review specific, relevant areas in HIV medicine. Many of the articles are drawn from the live CME course presentations. THM is distributed to almost 13,000 clinicians and others interested in HIV medicine and is published 5 or 6 times per year.

These activities were designed for physicians with a solid, working knowledge of HIV disease management, who provide comprehensive or specialty care or are involved in HIV/AIDS clinical trials/investigations. They were also relevant for other practitioners involved in HIV/AIDS care, including nurse practitioners, nurses, physician assistants, and pharmacists.

Following is a summary of each type of activity.

#### ***Advanced CME Courses In HIV Pathogenesis, Antiretrovirals, and Other Selected Issues In HIV Disease Management***

Seven live, full-day, advanced-level courses were sponsored in 2008. The speakers for each course were renowned national and local authorities on HIV/AIDS pathogenesis and clinical management. The topics were determined based on detailed needs assessments of the target audience by the IAS–USA and the course cochairs. Core topics included Issues in HIV Pathogenesis, Strategies for Initiating Antiretroviral Therapy (ART), Managing ART Failure, Uses and Interpretation of Drug Resistance Testing, Managing Metabolic Complications, and New HIV Drugs. To tailor the program to educational needs of the regions, the agenda also included topics such as Hepatitis B and C Virus Management, HIV and Adolescents, Dermatologic Manifestations, Lipid Abnormality Management, and Managing Substance Use, among others.

Course formats included didactic lectures, case-based interactive sessions, question-and-answer periods, and Meet-the-Expert discussion sessions.

<b>Dates</b>	<b>Locations</b>	<b>Cochairs</b>	<b>Approximate Number of Attendees</b>
February 26, 2008	Atlanta, GA Westin Peachtree Plaza	Michael S. Saag, MD Jeffrey L. Lennox, MD	370
March 14, 2008	New York, NY Marriott Marquis	Gerald H. Friedland, MD Paul A. Volberding, MD	595
March 31, 2008	Los Angeles, CA Sheraton Downtown	Ronald T. Mitsuyasu, MD Constance A. Benson, MD, FACP	180

May 6, 2008	San Francisco, CA Grand Hyatt	Robert T. Schooley, MD Stephen E. Follansbee, MD	260
May 13, 2008	Washington, DC Renaissance	Henry Masur, MD Michael S. Saag, MD	230
May 19, 2008	Chicago, IL Marriott Downtown	John P. Phair, MD Harold A. Kessler, MD	240
October 3, 2008	New York, NY Marriott Marquis	Douglas T. Dieterich, MD, FACP Roy M. Gulick, MD, MPH	485

On the whole, the health care practitioners who attended these courses were very experienced HIV clinical decision makers (see below). A total of 71% of the attendees held an advanced medical degree or license (MD, NP, PA). The health care practitioners that these courses reach manage sizable case loads of HIV-infected patients. 60% of the audience manages more than 50 HIV-infected patients. These data reflect the audience members who responded via an audience response system (ARS) to questions posed during the 7 live courses in 2008.

**Compilation of Clinical/Academic Training Background of the Approximately 2360 Attendees of 7 Live Courses in 2008**

Medical doctor	<b>50.10%</b>
Nursing professional	<b>14.60%</b>
Nurse practitioner	<b>15.08%</b>
Public health professional	<b>2.19%</b>
Physician assistant	<b>5.82%</b>
Pharmacist	<b>7.44%</b>
Health educator/counselor	<b>1.43%</b>
Other	<b>3.34%</b>
<b>Total</b>	<b>100%</b>

**Number of HIV-Infected Patients Managed by the Approximately 2360 Attendees of 7 Live Courses in 2008**

None	<b>13.55%</b>
1-4	<b>2.71%</b>
5-10	<b>2.84%</b>
11-15	<b>3.10%</b>
16-50	<b>18.32%</b>
51-100	<b>16.26%</b>
101-300	<b>26.32%</b>
301-500	<b>8.52%</b>
More than 500	<b>8.39%</b>
<b>Total</b>	<b>100%</b>

Evaluation instruments included a detailed evaluation form given to participants at the activity, ARS knowledge testing, pre- and postactivity tests, and declaration of specific practice changes that resulted from attendance at the activity. The table below summarizes the mean score for selected important aspects over all 7 courses.

**Compilation of Overall Evaluation Summaries from 7 Live Courses in 2008  
(Approximately 2360 attended and 1,517 evaluation forms returned)**

	Number who responded					Totals	Mean Score*
	Excellent	Very Good	Good	Fair	Poor		
<b>HOW WELL WERE THE COURSE OBJECTIVES MET?</b>	780	424	60	7	3	1274	1.45
<b>EDUCATIONAL VALUE OF ACTIVITY</b>							
Overall	852	390	60	4	3	1309	1.41
Selection of topics	727	437	113	18	5	1300	1.57
Content	757	422	99	15	5	1298	1.53
Value to your practice or responsibility	735	430	98	14	4	1281	1.53
Participant-driven lunch discussion (if participated)	461	256	92	20	8	837	1.64
<b>COMMERCIAL SUPPORT</b>							
Your assessment of the independence of the overall program content	829	317	83	14	2	1245	1.43

\* Key: 1 = Excellent, 2 = Very Good, 3 = Good, 4 = Fair, 5 = Poor

**Cases on the Web**

*Cases on the Web* is a series of interactive, case-based, internet activities available to HIV clinicians worldwide for CME credit. It is available on the IAS–USA Web site at [www.iasusa.org/cow](http://www.iasusa.org/cow).

The COW effort is guided by an 8-member Editorial Board. The COW Editorial Board includes Michael S. Saag, MD, Meg D. Newman, MD, Judith A. Aberg, MD, Roger J. Bedimo, MD, MS, Marshall J. Glesby, MD, PhD, Steven C. Johnson, MD, Harry W. Lampiris, MD, and Paul E. Sax, MD.

For 2008, 14 new or substantially revised COW presentations were released. The program attracted a record number of visitors in 2008. Through the end of December:

- 20,599 unique visits occurred for presentations released during 2008
- 86,072 unique visits occurred for all presentations released in current and previous years

As continuing medical education vehicles, COW presentations have been notably successful in meeting their stated learning objectives and in helping physicians improve their practices. The 2008 COW activity list below provides summaries of learner evaluations for both of these metrics for each presentation. COW presentations in 2008 were as follows:

Released: December 22, 2008

**Initial Evaluation of a Patient with a New HIV Diagnosis**

Authors: Michael Melia, MD, and Howard Libman, MD

Unique visit to date: 312

Will influence practice decisions? 67% likely/ 23% definitely/ 10% unlikely

Average rating for meeting objective: 1.50 \*Mean: 1 = excellent, 5 = poor

Released: November 25, 2008

**Management of Cryptococcal Meningitis in the Antiretroviral Therapy Era: More than Just Antifungals**

Authors: Anuradha Ganesan, MD, and Henry Masur, MD

Unique visits to date: 557

Will influence practice decisions? 70.59% likely/ 23.53% definitely/ 5.88% unlikely

Average rating for meeting objectives: 1.4 \*Mean: 1=excellent, 5=poor

Released: October 30, 2008

**Immune Reconstitution Inflammatory Syndrome in HIV-Infected Patients: Diagnostic and Management Challenges**

Authors: Jaime C. Robertson, MD, and Carl J. Fichtenbaum, MD

Unique visits to date: 999

Will influence practice decisions? 70.59% likely/ 27.45% definitely/ 1.96% unlikely

Average rating for meeting objectives: 1.49 \*Mean: 1=excellent, 5=poor

Released: October 2, 2008

**Issues in the Care of HIV and Hepatitis C Virus-Coinfected Patients: Antiretroviral Pharmacokinetics, Drug Interactions, and Liver Transplantation**

Author: David L. Wyles, MD

Unique visits to date: 979

Will influence practice decisions? 78% likely/ 15% definitely/ 5.77% unlikely

Average rating for meeting objectives: 1.41 \*Mean: 1=excellent, 5=poor

Released: September 09, 2008

**HIV-Associated Dyslipidemias: 2008 Edition**

Author: Roger J. Bedimo, MD, MS

Unique visits to date: 3826

Will influence practice decisions? 64.84% likely/ 27.47% definitely/ 7.69% unlikely

Average rating for meeting objectives: 1.71 \*Mean: 1=excellent, 5=poor

Released: August 26, 2008

**HIV-Associated Cognitive Impairment**

Author: Miguel G. Madariaga, MD, and Susan Swindells, MBBS

Unique visits to date: 1133

Will influence practice decisions? 68.18% likely/ 23.86% definitely/ 7.95% unlikely

Average rating for meeting objectives: 1.45 \*Mean: 1=excellent, 5=poor

Released: July 22, 2008

**Treatment of Hepatitis C Virus and HIV Coinfection: Selecting Candidates for Hepatitis C Virus Therapy and Managing Side Effects of Treatment**

Author: Melissa K. Osborn, MD

Unique visits to date: 1295

Will influence practice decisions? 61.19% likely/ 35.82% definitely/ 2.99% unlikely

Average rating for meeting objectives: 1.60 \*Mean: 1=excellent, 5=poor

Released: July 1, 2008

**Special Cases in Antiretroviral Therapy Initiation: Focus on Acute HIV and HIV/Hepatitis B Virus Coinfection**

Authors: Charles Hicks, MD, and Elizabeth Reddy, MD

Unique visits to date: 1246

Will influence practice decisions? 66.18% likely/ 29.41% definitely/ 4.41% unlikely

Average rating for meeting objectives: 1.51 \*Mean: 1=excellent, 5=poor

Released: May 29, 2008

**Sexual Addiction in an HIV-Infected Patient**

Authors: Edward R. Hammond, MD, MPH, and Glenn J. Treisman, MD, PhD

Unique visits to date: 1414

Will influence practice decisions? 81.97% likely/ 12.05% definitely/ 6.02% unlikely

Average rating for meeting objectives: 1.56 \*Mean: 1=excellent, 5=poor

Released: May 22, 2008

**Managing Initiation of Antiretroviral Therapy in a Patient with Chronic Methamphetamine Use and Depression**

Authors: Sara Vazquez, MD, and J. Kevin Carmichael, MD

Unique visits to date: 1194

Will influence practice decisions? 75% likely/ 13.46% definitely/ 11.54% unlikely

Average rating for meeting objectives: 1.50 \*Mean: 1=excellent, 5=poor

Released: May 5, 2008

**Managing Oral Health Problems in People with HIV Infection**

Author: David A. Reznik, DDS

Unique visits to date: 1766

Will influence practice decisions? 68.22% likely/ 26.17% definitely/ 5.61% unlikely

Average rating for meeting objectives: 1.48 \*Mean: 1=excellent, 5=poor

Released: March 3, 2008

**Strategic Use of Antiretroviral Drugs in the Patient with Numerous Treatment Failures and Multidrug Resistance**

Authors: Harry W. Lampiris, MD, and Elvin H. Geng, MD

Unique visits to date: 1834

Will influence practice decisions? 66.33% likely/ 27.55% definitely/ 6.12% unlikely

Average rating for meeting objectives: 1.68 \*Mean: 1=excellent, 5=poor

Released: February 22, 2008

**Syphilis in the HIV-Infected Patient**

Author: Jeanne M. Marrazzo, MD, MPH

Unique visits to date: 2547

Will influence practice decisions? 57.88% likely/ 33.55% definitely/ 8.55% unlikely

Average rating for meeting objectives: 1.52 \*Mean: 1=excellent, 5=poor

Released: February 15, 2008

**Using Biomedical Prevention as Part of HIV Prevention**

Author: Raphael J. Landovitz, MD

Unique visits to date: 1669

Will influence practice decisions? 60.67% likely/ 28.09% definitely/ 1.24% unlikely

Average rating for meeting objectives: 1.56 \*Mean: 1=excellent, 5=poor

**Topics in HIV Medicine**

The IAS–USA publishes this peer-reviewed, indexed journal in which specific, relevant areas in HIV medicine are reviewed. Many of the articles are drawn from presentations and lectures given at the live CME courses. As IAS–USA expert panels produce updates to guidelines, reprints of the original published articles are also included in *Topics in HIV Medicine*. Two such reprints were included in 2008: an update of antiretroviral drug resistance testing in adult HIV-1 infection, and an update of antiretroviral treatment guidelines for adult HIV infection. *Topics in HIV*

*Medicine* is also where the IAS–USA Drug Resistance Mutations Group publishes its important updates to the list of drug resistance mutations in HIV-1, 2 of which appeared in 2008. These updates are always eagerly anticipated by HIV care providers, and they are highly cited by clinicians and scientists around the world. *Topics in HIV Medicine* is distributed to the IAS–USA in-house database of 13,000 clinicians and others interested in HIV medicine who have requested the journal. The journal is published 5 or 6 times a year and is available on the IAS–USA Web site. *Topics in HIV Medicine* issues for 2008 (Volume 16, Issues 1-5) were as follows:

### **Issue 1**

Highlights of the 15<sup>th</sup> Conference on Retroviruses and Opportunistic Infections

- Basic Science Summary—*Mario Stevenson, PhD*
- Basic HIV Vaccine Development—*David I. Watkins, PhD*
- HIV Testing and Prevention Strategies—*Susan Buchbinder, MD*
- Neurologic Complications of HIV Disease and Their Treatment—*Scott Letendre, MD, J. Allen McCutchan, MD, MSc, and Ronald J. Ellis, MD, PhD*
- Complications of HIV Disease and Therapy—*Judith S. Currier, MD, and Diane V. Havlir, MD*
- Advances in Antiretroviral Therapy—*Timothy J. Wilkin, MD, MPH, Barbara Taylor, MD, Susan Olender, MD, and Scott M. Hammer, MD*

Special Contribution

- Update of the Drug Resistance Mutations in HIV-1: Spring 2008—*IAS–USA Drug Resistance Mutations Group*

### **Issue 2**

Perspective Articles

- When to Start Antiretroviral Therapy: A Swinging Pendulum?—*Joel E. Gallant, MD, MPH*
- Insulin Resistance in HIV Infection: Drugs, Host Responses, or Restoration to Health?—*Carl Grunfeld, MD, PhD*
- HIV-Associated Neurocognitive Disease Continues in the Antiretroviral Era—*David B. Clifford, MD*

Commentary

- Impact of Psychiatric Disorders on the HIV Epidemic—*Andrew F. Angelino, MD*

### **Issue 3**

Special Issue

- Reprint of “Antiretroviral Drug Resistance Testing in Adult HIV-1 Infection: 2008 Recommendations of an International AIDS Society—USA Panel.” (Reprinted from *Clinical Infectious Diseases*. 2008;47:266-285.)

### **Issue 4**

Perspective Articles

- Emerging Resistance Profiles of Newly Approved Antiretroviral Drugs—*Eric S. Daar, MD*
- Non–AIDS-Defining Malignancies in HIV—*Ronald T. Mitsuyasu, MD*
- Renal Dysfunction and Tenofovir Toxicity in HIV-Infected Patients—*Lynda A. Szczech, MD, MSCE*
- Pathogenesis and Treatment of Lipodystrophy: What Clinicians Need to Know—*Fred R. Sattler, MD*

Reprint

- “Antiretroviral Treatment of Adult HIV Infection: 2008 Recommendations of the International AIDS Society—USA Panel.” (Reprinted from *JAMA*. 2008;300:555-570.)

### **Issue 5**

Special Contribution

- Update of the Drug Resistance Mutations in HIV-1: December 2008—*International AIDS Society—USA Drug Resistance Mutations Group*

Perspective Articles

- Drug-Drug Interactions With Newer Antiretroviral Agents—*Judith A. Aberg, MD*
- Methicillin-Resistant *Staphylococcus aureus* Infections—*John G. Bartlett, MD*
- Improving Engagement in HIV Care: What Can We Do?—*Michael J. Mugavero, MD, MHS*

## II. RYAN WHITE HIV/AIDS PROGRAM CLINICAL UPDATE: HRSA/HAB COLLABORATION

The 11<sup>th</sup> Annual Clinical Update for clinical decision makers in Ryan White (RW) HIV/AIDS Program Parts A, B, C, and D clinics was sponsored in 2008. This live, 3-day meeting, August 25 to 27, 2008, in Washington, DC, was held in conjunction with the RW All Grantee Meeting with planning and with support from the Health Resources and Services Administration HIV/AIDS Bureau. This collaboration was established in 2000 and serves physicians, physician assistants, nurse practitioners, and others who perform services in RW programs and are actively involved in HIV patient care, including care for the underserved HIV-infected population.

The Clinical Update cochairs were Laura W. Cheever, MD, ScM; Michael S. Saag, MD; and Carmen D. Zorrilla, MD. The topics were determined based on detailed needs assessments of the RW clinicians by the IAS–USA and the meeting cochairs. Topics covered the essentials of HIV management. Initial antiretroviral therapy, use of newer approved drugs, and managing resistance and complicated failure were explored in depth, emphasizing practical take-home information. Several presentations targeted specific complications such as dermatologic manifestations of HIV, methicillin-resistant *Staphylococcus aureus*, and hepatitis B and C virus coinfections. Others focused on specific populations including adolescents, women, and aging patients. Experts also presented strategies for improving overall HIV clinical practice through effective outreach and case retention, quality improvement, and use of cohort data. The speakers were renowned national and local authorities on HIV/AIDS pathogenesis and clinical management.

Course formats included didactic lectures, case-based interactive sessions, question-and-answer periods, discussions, and interactive workshop sessions.

On the whole, the 715 health care practitioners who attended this conference were very experienced HIV clinical decision makers (see below). A total of 84% of the attendees held an advanced medical degree or license (MD, NP, PA), and 73% had been involved in HIV care for more than 6 years.

### Clinical/Academic Training Background

Medical doctor	60%
Nurse practitioner	20%
Nursing professional	9%
Physician assistant	4%
Other	3%
Pharmacist	2%
Public health professional	1%

### Length of Time Involved in HIV Care

>10 years	48%
6-10 years	25%
2-5 years	20%
< 1 year	7%

The attendees' primary specialties were largely infectious diseases (40%), family medicine (30%), and internal medicine (14%). These health care practitioners manage sizable case loads of HIV-infected patients. 79% of the audience managed case loads of more than 50 HIV-infected patients. These data reflect the audience members who responded to audience response system (ARS) questions posed during the Clinical Update meeting.

### Number of HIV-Infected Patients Managed

301-500	12%
101-300	49%
51-100	18%
16-50	10%
11-15	2%
5-10	1%
1-4	2%
None	6%

Evaluation instruments included detailed evaluation forms given daily to participants at the activity and an overall evaluation form on day 3 of the program, ARS knowledge testing, pre- and post-activity tests, and declaration of specific practice changes that resulted from attendance at the activity. The table below summarizes the mean score for selected important aspects.

### Overall Evaluation Summary\* (Approximately 715 attended and 371 evaluation forms returned)

	Number who responded					Totals	Mean Score*
	Excellent	Very Good	Good	Fair	Poor		
<b>HOW WELL WERE THE COURSE OBJECTIVES MET?</b>	200	131	18	3		352	1.5
<b>EDUCATIONAL VALUE OF ACTIVITY</b>	226	112	12	4		354	1.42
Quality of Clinical Update							
Selection of topics	186	132	32	3		353	1.58
Content	202	122	24	3		351	1.51
Value to your practice or responsibility	204	122	24	4		354	1.51
<b>COMMERCIAL SUPPORT</b>	250	78	19	4	1	352	1.38
Your assessment of the independence of the overall program content							

\*Mean evaluation scores based on ratings of : 1 = Excellent, 2 = Very Good, 3 = Good, 4 = Fair, 5 = Poor

### III. CORE FACULTY LECTURE SERIES

Based on a pilot program of 3 small-group, live workshops of 3.5 to 4 hours each, IAS–USA developed the Core Faculty Lecture Series (CFLS). This series presents state-of-the-art

interactive lectures and half-day workshops designed for small groups (n = 10-35) of very active HIV practitioners. The CFLS allows the IAS–USA to bring national thought leaders to local venues such as university and community medical centers to engage practitioners in a current, unbiased interactive educational format in geographic areas both inside and outside the major HIV epicenter areas nationwide.

In 2008, more than 200 high-volume HIV clinical decision makers (physicians, nurse practitioners, and physician assistants) have attended and unanimously agreed that this activity should continue. The workshops have covered antiretroviral strategies, resistance testing, and the role of new drugs in failure regimens. Beginning January 2009, a new curriculum on metabolic and cardiovascular complications of HIV was added.

<b>Dates</b>	<b>Locations</b>	<b>Workshop Leader(s)</b>	<b>Number of Clinicians</b>
February 25, 2008	Atlanta, GA	Jeffrey L. Lennox, MD J. Michael Kilby, MD	11
MARCH 13, 2008	New York, NY	Roy M. Gulick, MD David M. Margolis, MD	34
April 1, 2008	Los Angeles, CA	Eric S. Daar, MD	14
April 2, 2008	Melville, NY	Roy M. Gulick, MD	19
May 5, 2008	San Francisco, CA	Charles B. Hicks, MD Eric S. Daar, MD	38
May 12, 2008	Washington, DC	Michael S. Saag, MD	22
May 16, 2008	Princeton, NJ	David M. Margolis, MD David A. Wohl, MD	8
May 20, 2008	Chicago, IL	Michael S. Saag, MD	22
May 23, 2008	Syracuse, NY	David A. Wohl, MD Pablo Tebas, MD	10
September 11, 2008	Milwaukee, WI	Michael S. Saag, MD	29

Total number of attendees (all workshops): 308

**COMBINED ATTENDEE EVALUATION DATA\*:**

Quality of workshop (mean score)	1.25
Educational format (mean score)	1.21
Selection of topics (mean score)	1.21
Freedom from commercial bias (mean score)	1.22

\*Mean scores based on ratings of 1=excellent; 2=very good; 3=good; 4=fair; 5=poor

**IV. SPECIAL SESSIONS AT NATIONAL AND INTERNATIONAL CONFERENCES**

The IAS–USA hosts interactive sessions on the agenda of the major US and international scientific HIV/AIDS conferences. In 2008, sessions were held at the following conferences:

**XVII International AIDS Conference**

August 3-8, 2008  
Mexico City, Mexico

Session Title: Antiretroviral Strategies and International Antiretroviral Guidelines: Interactive, State-of-the-Art Session

Chairs: Pedro Cahn, MD, PhD, and Carlos del Rio, MD

Faculty: Joseph J. Eron, Jr, MD, Peter Reiss, MD, PhD, and Sharon Walmsley, MD, FRCP

**48<sup>th</sup> Annual Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)/Infectious Diseases Society of America (IDSA) 46<sup>th</sup> Annual Meeting: A Joint Meeting of the American Society for Microbiology and IDSA**

October 25-28, 2008

Washington, DC

Session Title: Current Issues and Controversies in HIV Infection Management

Convener: Paul A. Volberding, MD

Case Presenters: Roy M. Gulick, MD, MPH, and Sharon Walmsley, MD

Panelists: Carlos del Rio, MD, Grace A. McComsey, MD, Anton L. Pozniak, MD, FRCP, Susan Swindells, MBBS, and Victoria A. Johnson, MD

**Ninth International Congress on Drug Therapy in HIV Infection**

November 9-13, 2008

Glasgow, United Kingdom

Session Title: Current Challenges in Antiretroviral Management: An Interactive Case-Based Session

Chairs: Roy M. Gulick, MD, MPH, and Ian Williams, MD

Case Presenters: Roy M. Gulick, MD, MPH, Ian Williams, MD, and Jürgen Rockstroh, MD

**V. DRUG RESISTANCE MUTATIONS GROUP**

The IAS–USA Drug Resistance Mutations Group, an expert panel of volunteer scientists convened by the IAS–USA, reviews new data on HIV-1 drug resistance that have been published or presented at recent scientific meetings to maintain a current list of mutations associated with antiretroviral drug resistance. The mutations figures are designed for practitioners to use in identifying key mutations and in making therapeutic decisions. In 2008, 2 new lists were published in *Topics in HIV Medicine* following extensive reviews by the panel and a full panel meeting mid-year. The December 2008 list included 7 new mutations, the upgrading of 6 mutations to reflect their increased importance, and the removal of 1 mutation. It also included an extensive overhaul of the user notes and updating of the references accompanying the mutations figures. This new information was also made available in revised versions of the IAS–USA’s “Mutations Cards,” which are folded, laminated pocket cards containing the mutations figures and user notes in a handy format. The cards were included as an insert in the December 2008 issue of *Topics in HIV Medicine* and available for order by practitioners through the Web site. The IAS–USA Web site lists updates to the mutations figures, user notes, and references that are made in between full publications of the new versions.

**VI. CLINICAL PRACTICE GUIDELINES**

IAS–USA commissions renowned experts to develop clinical practice guidelines on focused areas of HIV medicine. In 2008, the volunteer Antiretroviral Guidelines panel and volunteer Resistance Testing panel each published an update of its recommendations.

***Resistance Testing***

Panel Members: Martin S. Hirsch, MD; Huldrych F. Günthard, MD; Jonathan M. Schapiro, MD; Françoise Brun-Vézinet, MD, PhD; Bonaventura Clotet, MD, PhD; Scott M. Hammer, MD;

Victoria A. Johnson, MD; Daniel R. Kuritzkes, MD; John W. Mellors, MD; Deenan Pillay, MD, PhD; Patrick G. Yeni, MD; Donna M. Jacobsen, BS; and Douglas D. Richman, MD

The Resistance Testing panel updated its 2003 recommendations in the July 2008 issue of *Clinical Infectious Diseases*.

### ***Antiretroviral Therapy in Adult HIV Infection***

Panel Members: Scott M. Hammer, MD (Panel Chair); Joseph J. Eron, MD; Peter Reiss, MD, PhD; Robert T. Schooley, MD; Melanie A. Thompson, MD; Sharon Walmsley, MD; Pedro Cahn, MD; Margaret A. Fischl, MD; Jose M. Gatell, MD, PhD; Martin S. Hirsch, MD; Donna M. Jacobsen, BS; Julio S. G. Montaner, MD; Douglas D. Richman, MD; Patrick G. Yeni, MD; and Paul A. Volberding, MD.

The Antiretroviral Guidelines panel updated its 2006 recommendations in the August 2008 issue of the *Journal of the American Medical Association*.

## **VII. IAS–USA INFORMATION AND RESOURCES**

### ***Drug Resistance Mutations in HIV-1 Figures***

The HIV drug resistance mutations figures and user notes are regularly revised and disseminated by the IAS–USA Drug Resistance Mutations Group, an independent volunteer panel of experts focused on identifying key HIV-1 drug resistance mutations. The group strives to provide current, accurate, and unbiased information on these mutations for HIV practitioners. The 2008 updates were published in March and December 2008 and reprinted in the form of a pocket card, which is distributed by request to HIV practitioners.

- In 2008, 16,360 cards were sent to HIV healthcare providers
- More than 3,000 cards were distributed to attendees at IAS–USA advanced CME courses

### ***Dermatologic Manifestations of HIV Disease Card***

In January 2007, the IAS–USA published a folding card, offering an updated overview of the dermatologic manifestations, as well as treatment options, of HIV; the card easily expands to a wall chart suitable for hanging. In 2008,

- 700 cards were distributed to HIV healthcare providers at our advance CME courses
- 110 requests for the dermatologic manifestations cards were fulfilled

### ***Oral Manifestations of HIV Disease Card***

In July 2006, the IAS–USA published a pocket-sized, folding card, describing the oral manifestations of HIV as previously reviewed in *Topics in HIV Medicine*, including typical presentations and treatment options.

- In 2008, 420 cards were requested by HIV healthcare providers
- More than 500 cards were distributed to attendees at IAS–USA advanced CME courses