# CARE OF THE HIV/AIDS PATIENT: A VIRTUAL CLINIC

# GUIDE TO THE CLINIC
## AND
# TECHNICAL REFERENCE

**Windows® and Macintosh® CD-ROM**

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## ABOUT THIS MANUAL

This manual is divided into two parts: a Guide to the Virtual Clinic and a Technical Reference. The Guide gives some background about the Virtual Clinic™ and Virtual Mini-fellowship™, gives biographical sketches for its faculty, tells how to install the program, and offers some suggestions about how to do the mini-fellowship. The Technical Reference can help deal with technical problems you might encounter.

## GUIDE TO THE VIRTUAL CLINIC

### BACKGROUND: IDEAL CONTINUING EDUCATION?

Most clinicians would value a continuing education experience that provides for effective, efficient, and enjoyable learning. The ideal CME or CNE experience would probably involve a visit to a major medical center, with opportunities to see patients, interact with experts (in the best case, a mentor), attend excellent lectures, etc., all of which would be available as desired, on demand. But this kind of ideal learning experience isn't available to most practitioners. They're difficult, if not impossible, to conduct on a regular basis, much less "on demand." Further, good learning depends on having good teaching cases and good teachers, the availability and quality of which is, to say the least, unpredictable. For most chronic diseases, it's impossible, in the short duration of a typical CME or CNE experience, to get first-hand sense of longitudinal care, the long-term physical and emotional impact of a disease on individual patients. Finally, even when good educational experiences are available, attending them usually involves significant expense and inconvenience to the practitioner.

Virtual Mini-fellowships™ seek to overcome these obstacles and to provide as close to an ideal continuing education experience as technology will allow. This program, dealing with HIV and AIDS,

- is available to you on demand, at any time or place, at a reasonable cost;
- applies sound pedagogy and learning theory in a carefully-designed, well-produced, comprehensive program of instruction;
- provides a mentor who is a recognized expert, "personally" guiding you and providing "individualized" feedback and case discussions;
- provides a simulated teaching case that compresses time, giving the experience, in the course of several encounters, of counseling, evaluating, and managing a "patient" over several years;
- allows you to "interview" real patients with HIV disease, providing a deeply humanistic view of this illness from the patient's perspective;
- provides detailed and insightful case discussions, in context with each simulated patient encounter, covering a broad range of bread-and-butter management topics;
- offers "mini-lectures" given by two experts in HIV care, a physician and a nurse, providing grounding in facts and principles of HIV care;
- provides additional, computer-based activities that allow you to learn concepts related to HIV infection and its management in more active, experiential ways.

These qualities are provided within a Virtual Clinic, a highly detailed, computer-generated environment that is intuitive and easy to use. We're convinced that you'll find this mini-fellowship to be a unique, informative, efficient, and highly *enjoyable* way to learn!

### FACULTY

### Host and Case Discussions
### John G. Bartlett, MD

John Bartlett is Chief, Division of Infectious Disease at Johns Hopkins University School of Medicine and Johns Hopkins University Hospital. A long-term participant in the battle against HIV and AIDS, Dr. Bartlett is widely regarded as a "clinician's clinician," blending extensive scientific knowledge and clinical experience with a deep commitment to his patients and students. He is noted for his teaching abilities and clinical insights, and is in great demand as a lecturer and consultant. It's a great honor to have Dr. Bartlett as host and discussant for this program.

### Lecturer and Patient Counseling Feedback
### Joyce Anastasi, RN, PhD

Director, Center for AIDS Research, Columbia University School of Nursing
Dr. Anastasi began working with HIV/AIDS patients early in the 1980's and was among the first clinical nurse specialist in HIV/AIDS in the nation. Dr. Anastasi later designed and established one of the first graduate programs in HIV. She continues to teach this curriculum, which includes both didactic and clinical experiences. Her curriculum was incorporated into a joint project titled, *HIV/AIDS: An Interactive Curriculum for Health Sciences* developed by Columbia University School of Nursing and Dartmouth's Interactive Media Laboratory, for which Dr. Anastasi was a chief advisor and principal investigator. Dr. Anastasi presently directs the Center for AIDS Research and conducts research on symptom management and HIV, funded by NIH/NINR.

### Lecturer and Patient Management Feedback
### Jay Dobkin, MD

Director, AIDS Program, Columbia Presbyterian Medical Center
Jay Dobkin heads the AIDS Center at Presbyterian Medical Center and is Associate Professor of Clinical Medicine at the College of Physicians and Surgeons, Columbia University, New York City. A specialist on infectious diseases with over a decade of experience managing HIV infection, his practice serves a large and very diverse patient population. Dr. Dobkin has been extremely active in educating health professionals, including participation in development of computer-based learning programs; he was a medical advisor during production of *HIV/AIDS: An Interactive Curriculum for Health Sciences.* He was principal investigator for the Columbia-Presbyterian AIDS Clinical Trials Unit, National Institutes of Health.

### Pediatric Case Discussion
### John C. Modlin, MD

John Modlin is Chair of the Department of Pediatrics at Dartmouth Medical School and Director of the Diagnostic Virology Lab there.  Dr. Modlin has recently stepped down from the FDA Antiviral Drugs Advisory Committee, where he served as Chair during the final year of his term. He is currently a member of the CDC Advisory Committee on Immunization Practices. Dr. Modlin has authored or co-authored more than 100 papers in the medical literature. His research interests include perinatal viral infections, mechanisms of enterovirus infections, and poliovirus immunization.

### Designed, Directed, and Produced by

**Joseph V. Henderson, MD**

Joe Henderson directs the Interactive Media Laboratory at Dartmouth Medical School. Having developed award-winning interactive media programs for over a decade, Dr. Henderson is well known as a medical educator with a firm grasp of technology-based learning and its power to involve and inform. His goal is to provide for learning experiences that are intellectually and emotionally stimulating, enjoyable, and, in the best of cases, profound. He thinks that with this Virtual Clinic program he and his development team (see credits) "have come pretty close to achieving those goals."

## INSTALLING THE VIRTUAL CLINIC PROGRAM

**Important Note:** Please consult the Read Me file on the **Clinic Disc** for additional technical information and troubleshooting tips

## WINDOWS

**Microsoft® Windows® 95/98/ME/2000, Windows NT 4/2000 System Specifications**:

|  | Required | Recommended |
|---|---|---|
| **Computer type** | Intel Pentium or 100% Intel-compatible microprocessor, 200Mhz, with 23MB hard disk space. | Pentium II, 300Mhz or better, 23MB hard disk space. |
| **Video** | 2MB video RAM (16-bit color or better at 640x480) | 4MB+ video RAM (24-bit color at 640x480 or higher) |
| **CD-ROM Drive** | 2x CD-ROM drive with 300kBps data transfer rate | 4x CD-ROM drive or faster |
| **Sound Card** | SoundBlaster or 100% SoundBlaster-compatible sound card and speakers | 16 bit SoundBlaster or 100% SoundBlaster-compatible and speakers |
| **Operating System** | Windows 95/98/ME, Windows NT 4.x/2000 | Windows 95/98/ME, Windows NT 4.x/2000 |

**Windows Installation**
1. Insert the **HIV Virtual Clinic Disc** in your CD-ROM drive.
2. Open "My Computer" from Desktop and open icon of CD-ROM. Start the installation by double-clicking "Setup.exe". You can install to the default location, C:\Program Files\HIV Virtual Clinic, or choose your own location.
3. If QuickTime (software provided by Apple Computer, Inc., that displays video and audio for the Virtual Clinic) is not currently installed on your system, you will be led through its installation.

**Macintosh**

**Macintosh System Specifications:**

|  | Required | Recommended |
|---|---|---|
| **Computer type** | Macintosh PowerPC processor and 23MB hard disk space. | Macintosh PowerPC processor and 23MB hard disk space. |
| **Video** | Thousands of colors | Millions of colors |
| **RAM** | 8 MB RAM | 12 MB RAM |
| **CD-ROM Drive** | 2x CD-ROM drive with 300kBps data transfer rate | 4x CD-ROM drive |
| **Operating System** | System 7.0x or higher | System 8.1x or higher |

**Macintosh Installation**
1. Insert the **HIV Virtual Clinic Disc** in your CD-ROM drive
2. Double-click the **"Mac HIV VC"** icon and follow the instructions on screen.
3. If QuickTime is not currently on your computer, it will be installed during this process and your Macintosh will need to be restarted for system changes to take effect.

## LAUNCHING THE PROGRAM

First, before launching the program, **reset your screen graphics** as needed. The Virtual Clinic works best with graphics set at 640x480 or 800x600 screen resolution and 24 bits per pixel (millions of colors). The program will not run in 8-bit mode (256 colors). Usually monitor resolution higher than 1024x1068 will make the video appear unacceptably small. Please refer to your computer system manual for guidance in how to establish these settings.

**Launching** the Virtual Clinic program depends on the kind of computer you're using and its operating system.

**If you have a PC running Windows**
Select **Programs**, **HIV Virtual Clinic**, and the corresponding program icon from the **Start** menu.

**If you have a Macintosh**
Double-click on the **HIV Virtual Clinic** program icon in the HIV Virtual Clinic folder.

## A "TRAVEL GUIDE" TO YOUR MINI-FELLOWSHIP

What you do -- and the order in which you do it -- is up to you. That said, here's a quick "travel guide" to the program. It's a recommended path, one of several you might take.

First, sign in to the mini-fellowship. It's important that you **remember the name you use** and **sign in the same way** every time you use the program. (Note that if you use different sign-on names, the program will keep track of progress for each of those names; using one name makes it easier to track your progress and get continuing education credit.)

The first time you use the program, there are a couple of disclaimer and credit screens. Click the mouse to hurry these along.

On your initial visit, we recommend you do the **Orientation**. It only takes a few minutes and it's a good overview.

Next, we recommend you go into Examining Room A or B. Here's how to decide:

> Enter **Room A** if you want to learn about pre-test assessment and counseling (Visit 1), and assessment and possible treatment of early HIV infection (Visit 2).

> Enter **Room B** if you already know about these (or simply want to skip them for now). There you'll meet your patient a few years after her initial diagnosis and workup, after she's begun to develop signs and symptoms of advancing disease.

In every encounter, you'll be asked to assess and counsel your patient. In some of the encounters, you'll also be asked (in a friendly way) to help make some decisions about her care. Note that if you decide to start with B, you'll be able to go back and pick up the Room A encounters later. **Room A is recommended, if you have the time and interest.**

At the end of each encounter, Dr. Bartlett will offer to **discuss** issues raised by that encounter. Topics and times will be given in advance, so you'll know what you're getting into. **We recommend you say, "yes." John Bartlett is a clinician's clinician who's also a great teacher!** (By the way, you can elect to get any case discussion at any time by going to the Conference Room.)

After completing your first encounter (Room A or Room B), head down the hall to the **Learning Resources Room**. Go though the door by clicking on it. Pick the **Patient Interviews** kiosk on the right. Select the **Introduction** and meet these remarkable people. Do one or two more interviews; they don't last more than a couple of minutes each.

Next, head over to the Lectures/Activities area (click the bottom of the interviews kiosk). The topics are arranged in order, with more theoretical or basic topics at the top and more clinical topics at the bottom of the kiosk. After you choose a topic, you can attend mini-lectures (click on the left) or learn in a more active way via the activities (click on the right). The lectures can be done in their entirety (10 to 20 minutes each) or by subtopic. The activities generally take from 2 to 4 minutes to complete. **Recommend you do the lectures and/or activities for one or two topics**, as desired.

Windows users can access pertinent World Wide Web links from the middle kiosk in the Learning Resources room. Clicking on the graphic of the computer will launch your default web browser application, enabling you to visit Internet sites. When you are ready to return to the Virtual Clinic, click on the minimized tab "HIV Virtual Clinic" on your Windows taskbar (usually at the bottom of your screen.)

You might then **take a break**, or head back to the clinic and do your **second encounter** with Laurie Matthews.

To take a **break**, go to the **Clinic Overview** by clicking the icon that looks like a fire evacuation diagram. Click the EXIT sign in the right lower corner of the overview. Alternatively, you can quit the program by hitting the **Alt+Q** (Windows) or ⌘+**Q** (Macintosh) keys at the same time. The program will automatically save your location in the mini-fellowship. If you're in the middle of an encounter with your simulated patient, we recommend you complete the encounter before exiting. You'll be asked if you want to save your location in the encounter and can then exit the program if you decide to leave prematurely.

Take some time off.

When you come back to the program, sign in with the same name you used before. Click the **Restore** button to pick up where you left off last time you were in your mini-fellowship.

**IMPORTANT NOTE:** If you want, you can start from the beginning of the program at any time; if you select this, all record of your progress up to that point will be lost, so **make sure** you want to do this. If you simply want to show someone the program from the beginning, try signing in with a different name from the one you're using for your mini-fellowship.

**FINAL NOTE:** It can take from 2-8 hours to complete this program, depending on how much of it you decide to do. At a minimum, we recommend you do the three patient simulation encounters in Examining Room B, and a few of the interviews, mini-lectures, and activities in the Learning Resources Room. The **second encounter in Room B** is a particularly important part of the mini-fellowship!

## USING THE VIRTUAL CLINIC

### Signing in
Make sure you use the same name, with exact spelling, each time you use the mini-fellowship. Reasons for this are discussed above, in the Travel Guide.

### Making a selection
You make selections in the normal way, by moving your mouse cursor and clicking the mouse button (left button for Windows users). When the cursor is over an area that can be selected, it changes from an arrow shape to a hand shape.

### Moving around
There are a couple of ways to move around in the Clinic: from the **Overview** map or from the **Hallway**.

> **Overview:** You get to this view by clicking on any of the **overview icons** (they look like evacuation diagrams) that are scattered throughout the clinic. From the map, just click on any area that interests you, and that drops you into the appropriate location in the **Hallway**.
>
> [Pictures of Overview icon and Overview map nearby.]
>
> **Hallway:** To enter a room, click on the appropriate doorknob. To move down the hallway, click to the side of the screen in the direction you want to go. To get to the Overview, click on a "fire evacuation plan."
>
> [Picture of Hallway, looking down toward LR Room, nearby.]

**Viewing patient records**
When in the Hallway in front of an examining room door, you can elect to view your simulated patient's chart. In general, you can turn pages by clicking on the appropriate side of the chart. (NOTE that for slower computers, particularly running Windows 3.1, it can take some time for a new page to appear; please be patient.) As your simulated patient's disease progresses, her chart grows quite a bit; we've provided record **Tabs** to help you jump around. When finished viewing the chart, click on the "Done" tab or button.

**Virtual Time**
Your simulated patient, as with an actual HIV patient, will experience disease progression over several years. The dates in the chart will reflect that, so don't be surprised if you see dates that are 3+ years in the future. It goes without saying that, as you participate in her management, **today's standards of care apply**, even though we're virtually in the future. This sounds more confusing than it is...  we hope.

**Tracking Your Progress in the Mini-fellowship**
You can wander about the Clinic, doing as much or as little as you wish. The program will automatically keep track of what you've done in each Clinic area. When you return to the Conference or Learning Resource Rooms, what you've accomplished in previous visits will be noted by a check mark.

The simulated patient encounters are handled differently. We recommend that you allot enough time to complete a visit once you've started it; for each encounter, a note near the doorknob estimates how much time it should take. The program will keep track of which visit you've completed and will automatically present you with the next one in sequence when you're ready for it. Note that once you've elected to start with Room A or B, it's best to continue the sequence you've started; that is, starting with room A should be followed by a second visit to Room A. There's a way to get out of this sequence, by pressing Alt+V (Windows) or  +V (Mac) (see "Hotkeys," below).

**Navigating through Lectures, Case Discussions**
You can move forward and backward through the lectures and case discussion screens by clicking on the VCR-like control strip available on most screens. The five buttons, from left to right, have the following effect: 1) "fast-rewind" to the previous screen; 2) "rewind" to the beginning of the currently playing screen; 3) "stop" the audio, with options to resume or end your current section; 4) "play"; 5) "fast-forward" to the next screen. Note that this control strip is not available during video sequences or when no audio is playing. If the cursor isn't responding while trying to click these buttons, the program is probably busy and will return control shortly.

**Taking a break: Exiting and Resuming the Program**
You'll probably want to do your mini-fellowship in several sessions. To **exit** the Virtual Clinic program, go to the Clinic Overview by clicking on any Overview icon which looks like a fire evacuation diagrams. Then click on the EXIT sign in the right lower corner. Your location (progress) in the mini-fellowship will be automatically saved. You'll be able to pick up where you left off the next time you sign back into the Clinic. An alternative way to Exit, which can be used anywhere in the Clinic, is to press Alt+Q (Win) or  +Q (Mac).

To **resume** your mini-fellowship, launch the program. When you sign in, use exactly the same name that you used previously. You should then click the RESTORE button and your mini-fellowship will pick up where you last left off, or very near there. As noted in the Travel Guide, only select Start at the Beginning if you really want erase all record of your current progress through the mini-fellowship.

## "HOTKEYS"

"Hotkeys" provide added flexibility in using and navigating through the Virtual Clinic. Hold down the Alt key while pressing a letter, as listed below.

**Alt+O (Windows)(letter O) or ⌘+O (letter O) (Mac)** - Main Clinic Overview
**Alt+V (Windows) or ⌘+V (Mac)** - Menu of each Simulated Patient Visit
**Alt+C (Windows) or ⌘+C (Mac)** - Menu of case discussions
**Alt+P (Windows) or ⌘+P (Mac)** - Pauses video or audio,  press again to continue
**Alt+Q (Windows) or ⌘+Q (Mac)** -  Quits the program
**ESC Button (Windows or Mac)** -  Skips through video or audio clip. **WARNING:** this function will advance you through possibly vital information.  Use sparingly.

## PROGRAM UPDATES

The developers and the publisher of this program have taken care to make certain that the information presented is correct and compatible with standards of care generally accepted in the United States at the time of publication.  Nevertheless, as new information becomes available, changes in treatment and in the use of drugs may become necessary.  Neither the publisher, the developers, the care providers, nor other individuals participating in the program assume any responsibility or liability for the consequences of any health care decisions made by a user of the program or other person with access to the information in the program.

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**In Memoriam**

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**TECHNICAL REFERENCE**

**TROUBLESHOOTING WINDOWS**

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Using multimedia programs can sometimes be frustrating because of the various hardware, software and operating system components that must work together. Most problems can be solved by simply inspecting the hardware and software setup of your machine.

Below are step-by-step guidelines for checking the most common causes of problems when running the Virtual Clinic program under Windows. Most technical difficulties are caused by outdated drivers for video, CD-ROM, and sound cards, or from improperly configured equipment. Your hardware manufacturer should be able to provide you with updated drivers. Manuals for your equipment and for Windows may explain optimal settings for your system.

If you are experiencing problems with the HIV Virtual Clinic program, start by checking system requirements. This program requires at least **8**MB of RAM and **23** MB of hard drive space. If you do not have sufficient memory on your system, the program will not run.

**WINDOWS SOUND**

Sound problems occur for many reasons, so they're often hard to track down. Here are some general suggestions for checking the most common sound problems. These steps don't need to occur in order; they are just general guidelines for checking the various things that can go wrong with sound.

**Step 1: Verify all hardware components**
Check that all cables are properly connected, that speakers are plugged in and turned on, that the volume on your speakers is set appropriately.

**Step 2: Check sound drivers by playing system sounds**
If your hardware is properly set up, make sure that you have Windows sound drivers installed by playing system sounds:

IN WINDOWS (95/98/ME/2000/NT):
- Begin by clicking the **Start** button, point to **Settings** and click **Control Panel**. Then, double click on the **Sounds** icon to open the Sound Properties dialog box.
- If the **Events** box lists items in black, select one (e.g. "Default Beep") and click the **Play** button. If you hear nothing, check your hardware; be sure your cables are securely connected, that speakers are on and volume controls are adjusted properly. If problems persist, check the manual that came with your sound device.
- If the events in the **Events** list are grayed out, then the Windows drivers for your sound device are not correctly installed or the computer does not have sound capability. Refer to the manual that came with your sound device for proper installation procedures.

**Step 3: In Windows 95/98/NT only, check volume levels**
- From the Windows **Start Menu**, select **Programs**, **Accessories**, **Multimedia**, then **Volume Control**.
- If you do not have the Volume Control installed on your system, select **Settings**, **Control Panel** from the **Start** menu. Double-click on the **Multimedia** icon and click on the **Audio** tab to set the volume.

**Step 4: Update your sound driver to the most current version**
See **Updating Windows Device Drivers** below for information about how to get the most recent updates.

**Step 5: Check the README file for more details**
If you are still having problems with audio playback, please refer to the README file located in the **HIV Virtual Clinic** program group. This file provides detailed information on a variety of configurations and specific cards.

## WINDOWS VIDEO

When running the Virtual Clinic program, you may see brief stuttering effects during video. Unless these effects occur frequently or are of long duration, they are no cause for concern. Installing the most current version of your video driver might help. It may also help to have the latest version of Apple's QuickTime software (http://www.apple.com/quicktime), which is used to play audio and video media. See **Updating Windows Device Drivers** for information about how to get the most recent updates. If, after updating your driver, you are still experiencing problems with video playback, please refer to the README file located in the **HIV Virtual Clinic** program group. The file provides detailed information on a variety of configurations and specific cards.

If your fonts look particularly ragged, check to make sure that following TrueType fonts are installed on your system: Arial, Times New Roman and Courier New. To double check fonts in Windows 95, select **Settings**, **Control Panel** from the **Start** menu and double-click on the **Fonts** icon.

Although unlikely, if the program display becomes corrupted, let the Virtual Clinic program continue to run to refresh the display. If you still cannot see the display, quit the program using ALT+Q and restart.

## WINDOWS SCREEN SAVERS

If you are experiencing display corruption due to your screen saver, disable it.
To disable the built-in screen saver for Windows 95/98/NT:
- Click the **Start** menu, then point to **Settings** and choose **Control Panel**.
- Double click on the **Display** icon to get the Display Properties dialog box. Choose the **Screen Saver** tab.
- Find the **Name** box and use the down arrow to the right of the box to highlight the option **(None)**. Click **OK**.

## CONFLICTS WITH OTHER WINDOWS PROGRAMS

Do not run processor intensive programs while running the HIV Virtual Clinic program. Exit any other programs that may be running in the background (including CD Player application).

IN WINDOWS 95, you can reconfigure your startup folder to prevent Windows 95 from automatically starting applications that run in the background and may conflict with the Virtual Clinic program:
- Select the **Start** button in Windows 95. In the **Settings** menu, choose **Taskbar** to get the Taskbar Properties dialog box.
- Click **Start Menu Programs**.
- Click **Advanced** in the Customize Start Menu Group.
- Double-click on **Programs** folder. Create a new folder called "Startbk" by selecting **New** and **Folder** from the **File** menu.
- Open the **Startup** folder; move items to the new folder by clicking and holding the right mouse button and dragging the selected item into the new folder. Choose "Move here" when prompted and repeat until the **Startup** folder is empty.
- Restart Windows 95.

It is possible that changes to the system after installation, such as the installation of another multimedia program, may cause unexpected problems. For example, a program that uses an earlier version of QuickTime might cause conflicts; reinstall the Virtual Clinic program to redress this problem.

### UPDATING WINDOWS DEVICE DRIVERS

We recommend that you update your Windows device drivers to the most current versions. The majority of sound and video problems will be corrected by updating Windows drivers. Your hardware dealer should have access to the most recent drivers. In addition, Microsoft has made a great deal of information and help available through the Windows Driver Library (WDL) and the Microsoft Download Service (MSDL); the MSDL phone number is (206) 936-MSDL (6735). Internet addresses are: World Wide Web: **http://www.microsoft.com**; ftp: **ftp.microsoft.com**. If you have a modem, you can download the drivers. Follow instructions found in the WDL.TXT file.

### WINDOWS PERFORMANCE

Here is a summary of things to try if you are having performance problems:

- Do not run processor-intensive programs while the Virtual Clinic program is running, especially on a lower-end machine.
- Turn off CD-ROM drive caching to improve video performance.
- Turn off any screen savers.
- Disconnect your computer from your network.
- Defragment your hard drive (refer to instructions which came with your operating system).

### TROUBLESHOOTING MACINTOSH

Using multimedia programs can sometimes be frustrating because of the various hardware, software and operating system components that must work together. Most problems can be solved by simply inspecting the hardware and software setup of your machine.

Below are step-by-step guidelines for checking the most common causes of problems when running the Virtual Clinic program under Macintosh. If you are experiencing problems with the Virtual Clinic program start by checking system requirements. This program requires 8 MB of RAM and 23 MB of hard drive space. If you do not have sufficient memory on your system, the program will not run. Additional hardware requirements are listed in the Appendix at the back of this manual.

### MACINTOSH SOUND

All Macintosh computers listed under the minimum requirements can produce sound without additional speakers or hardware. If there is no audio and you are using external speakers, the first thing to check is that they are plugged in, turned on, and all cables are properly connected. You may also need to adjust the software volume control. Here's how:

- Go to the Apple menu and select **Control Panel**. When the submenu appears, open the Sound control panel.
- Choose **Volume** from the submenu, and click and drag the volume control to an appropriate level.

You may also need to ensure that the Playthrough checkbox is selected under the Options section of the **Sound In** submenu.

## MACINTOSH VIDEO DISPLAY

Be aware that occasionally, you may see brief stuttering effects that are the result of normal system demands; unless these effects occur frequently or are of long duration, they are no cause for concern. If synchronization problems are persistent, try disabling control panels and extensions that may be taxing the processor. In particular, try this:
• Go to **Chooser** under the Apple menu and turn off AppleTalk by clicking the Inactive radio button.
• Then go to the **Sharing Setup** Control Panel and turn off file sharing.
• To disable extensions, use **Extension Manager** (if your system has it) or drag extensions into a different folder (e.g., "Extensions Disabled").
• You will need to reboot your system for these changes to take effect.

You can restore extensions when you are not using the Virtual Clinic program by turning them back on in **Extension Manager** or by restoring them to the active "Extensions" folder in your "System" folder.

The program was designed to use the True Type (suitcase) fonts Times New Roman and Helvetica, which should be already installed in your system. If these fonts are disabled, or have been replaced with postscript or type 1 fonts, the computer will try to use what it considers the closest font, which may cause text layout problems (crowding, words off screen, strange line breaks, etc.). If this happens, reinstall original fonts.

## MACINTOSH PERFORMANCE

Here is a summary of things to try if you are having performance problems:
• Set your monitor resolution to a lower setting, like 640x480.
• Do not run processor-intensive programs while the Virtual Clinic program is running, including screen savers, email or web browser applications.
• Disconnect your computer from your network.
• Defragment your hard drive (refer to instructions which came with your operating system).

### ADDITIONAL TECHNICAL SUPPORT

Additional technical support information for the HIV Virtual Clinic program is on the web site of the Interactive Media Laboratory at:

`http://iml.dartmouth.edu/education/programs/hivtx/index.html`