This document includes all instructions needed to install, re-install or upgrade to the FAS Facial Photographic Analysis Software version 2.1.0. Contact Susan Astley Hemingway, PhD with any questions <u>astley@uw.edu</u>

An overview and video demonstration of the FAS Facial Photographic Analysis Software can be found on our website. <u>https://depts.washington.edu/fasdpn/htmls/face-software.htm</u>

The User received an email with instructions for how to download the **FASdownload.zip** file from the FASDPN Clinic. If you no longer have the file, contact Susan Astley Hemingway, PhD <u>astley@uw.edu</u>.

The **FASdownload.zip** file contains the **FAS Software & Installation Instructions** folder with the following contents:

- FAS2016 folder (FAS Facial Photographic Analysis software (version 2.1)
- ActiveX Control Pad Setup.exe
- FASsoftware-Detailed-Install-Instructions110121.pdf
- FASsoftware-Quick-Install-Instructions110121.pdf
- FAS\_Instruction\_Manual\_v2.1.0-050616.pdf

### Installation Requirements:

- The computer must have an English version of Windows Operating System 7, 8 or 10
- The local Windows User login must have administrator privileges to install this software.

### Installation REQUIRES the following 3 steps:

- 1. Set the Regional Date Setting on the computer to English (United States).
  - Required by the FAS software to compute patient age correctly.
  - See instructions starting on page 2.

### 2. Install ActiveX Control Pad Setup

- ActiveX provides dll files the software will require that are no longer provided with Windows
  operating systems.
- See instructions starting on page 6.

### 3. Install the FAS Facial Software

• See instructions starting on page 11.

## Step 1: Set the Regional Date Setting on your computer to English (United States)

The FAS Facial Photographic Analysis Software computes the age of the patient in a photograph from their birthdate and the date the photo was taken. This computation requires your computer's Regional Date Setting be set to English (United States).

Set your computer's "Regional Date Setting" to the <u>English (United States)</u> format as illustrated below in Figure 1. Instructions for how to do this are presented below.

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First d	lay of week:	Sunday ~	
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Short	date:	10/31/2021	
Long	date:	Sunday, October 31, 2021	
Short	time:	3:14 PM	
Long	time:	3:14:08 PM	
		Additional settings	
		OK Cancel	Apply

Fig, 1. English (United States) format for dates

In the U.S. we typically report dates in the order (month/day/year). Some countries have different conventions for reporting dates. The United Kingdom and Australia typically report dates in the order (day/month/year).

For example: the date **November 8, 2015** is typically reported as:

- 11/08/2015 in the United States (MM/dd/yyyy) (Fig 1) and
- 08/11/2015 in Australia, Canada or the United Kingdom (dd/MM/yyyy) (Fig. 2) In the U.S. 08/11/2015 is August 11, 2015.

This can cause confusion for computer programs (like our facial software) that use dates to calculate age.

If you are from Australia, you will likely discover your Region Format is set to **English (Australia) (**Fig. 2). If you are from Canada or the United Kingdom you will find your Region Format is set to English (Canada) or English (United Kingdom). All three of these countries use a short date format of dd/MM/yyyy.

Match Windows disp	lay language (recommended)
anguage preferences	
Date and time form	ats
Short date:	d d/MM/yyyy
Long date:	dddd, d MMMM yyyy
Short time:	h:mm tt
Long time:	h:mm:ss tt
First day of week:	Monday
Examples	
Short date:	8/11/2015
Long date:	Sunday, 8 November 2015
Short time:	1:59 PM
Long time:	1:59:27 PM
	Additional company

Fig. 2. Example of the English (Australian) regional date setting.

If you are using the FAS Facial Photographic Analysis Software and you reside outside the United States, you need to set your computer's Regional Date Setting to **English (United States**).

To switch your computer's Regional Date Setting to **English (United States)** follow the directions below. This is not a permanent setting. You can easily toggle your computer back and forth between the different Regional Date Settings.

### To view and reset your computer's Regional Date Setting

Follow these steps (this example is based on a Windows10 operating system):

- 1. Locate the search field Type here to search in the lower left margin of your computer monitor. Type in the phrase **Control Panel** and hit Enter. The window below in Fig. 3 will appear.
- 2. Left mouse click on the link for **Change date, time, or number formats** under the **Clock and Region** menu option (Fig. 3).



3. From the **Region** dialog box (Fig. 4), check if the Format is already set to English (United States). If it is, click **Cancel** and you are done.

anguage preferences Date and time formats Short date: MM/dd/yyyy  Long date: dddd, MMMM d, yyyy  Short time: h:mm tt	
inglish (United States)  anguage preferences Date and time formats Short date: MM/dd/yyyy  Long date: dddd, MMMM d, yyyy  Short time: h:mm tt	
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Date and time formats Short date: MM/dd/yyyy   Long date: dddd, MMMM d, yyyy   Short time: h:mm tt	
Short date: MM/dd/yyyy ~ Long date: dddd, MMMM d, yyyy ~ Short time: h:mm tt ~	
Long date: dddd, MMMM d, yyyy v Short time: h:mm tt v	
Long date: dddd, MMMM d, yyyy ~ ~ Short time: h:mm tt ~	
Short time: h:mm tt 🗸	
Long time: h:mm:ss tt ~	
First day of week: Sunday ~	
Examples	
Short date: 10/31/2021	
Long date: Sunday, October 31, 2021	
Short time: 3:14 PM	
Long time: 3:14:08 PM	
Additional settings	

4. If your computer is set to another Region (e.g., English (United Kingdom), left mouse click on the gray dropdown menu below the Format statement (Fig. 5) and select the **English (United States**) option from the menu. Note that when you do this, the short date format will be expressed in the U.S. convention of MM/dd/yyyy.



5. Click on the Apply button in the lower right corner of the dialog box (Fig. 4). Then click the OK button.

You are done. When you are not using the FAS Facial Software, switch your computer back to the Regional Date Setting it was originally set on.

# Step 2: Install ActiveX Control Pad Setup.exe

- 1. The ActiveX Control Pad Setup.exe file was delivered to the User when they downloaded the **FASdownload.zip** file from our FASDPN Clinic.
- 2. Once the ActiveX file is on your computer, right-click on the file 'ActiveX Control Pad Setup.exe' then click on properties.

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→ * ↑	This PC > Desktop > FAS2016 Windo	ows 10 32bit Support Files	5 V	Search FAS2016 Wind	dows 10 3 🔎
🖈 Quick access	Name	Date modified	Туре	Size	
🔜 Desktop 🍡	ActiveX Control Pad Setup	2/34/3016 11:52 A	M Annlication	2,804 KB	
Downloads     Documents		View Sort by Group by	>		
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		New	>		
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- a. Click the 'Compatibility Tab'
- b. Check the checkbox 'Run this program in compatibility mode for:'
- c. Select 'Windows XP (Service Pack 2)' from the drop-down list
- d. Click OK

Security _	Dotaile	Previous Version	IS
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Pun compatibility Run compatibility low do I choose co Compatibility mode Run this progra Windows XP (See Settings	atibility troubleshooter troubleshooter mpatibility settings manual am in compatibility mode for rvice Pack 2)	<u>₩?</u> c	
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Change settir	ngs for all users		

- 3. Now run the 'ActiveX Control Pad Setup.exe' by double-clicking it.
- 4. It may ask 'Do you want to allow this app to make changes to your PC?'. Click the 'Yes' button.
- 5. Click 'Yes' to accept the End-User License Agreement.



6. A window will pop-up asking to install the NTVDM feature **if your system doesn't have it yet**. Click the **'Install this feature'** button.

÷	📷 Windows Features	×
	An app on your PC needs the following Windows feature:	
	NTVDM	
	Install this feature	
	→ Skip this installation Your apps might not work correctly without this feature.	
	Cance	

**NTVDM** is a process that belongs to the Windows 16-bit Virtual Machine. It provides an environment for a 16-bit process to execute on a 32-bit platform.

7. After the feature is installed, you'll see a pop-up window saying NTVDM feature was successfully installed. Click the '**Close**' button.



8. You'll then see another window to install the Microsoft ActiveX Control Pad Setup. Click the '**Continue**' button.

A Microsoft ActiveX Control Pad Setup	
Microsoft ActiveX Control Pad Setup	
Microsoft ActiveX Control Pad Setup	
Welcome to the Microsoft ActiveX Control Pad installation program.	
Setup cannot install system files or update shared files if the files are in use. Before continuing, close any open applications.	
WARNING: This program is protected by copyright law and international treaties.	
You may install Microsoft ActiveX Control Pad on a single computer. Some Microsoft products are provided with additional rights, which are stated in the End User License Agreement included with your software.	
Please take a moment to read the End User License Agreement now. It contains all of the terms and conditions that pertain to this software product. By choosing to continue, you indicate acceptance of these terms.	
Continue Exit Setup	

9. Click the '**Complete**' button to do a full installation.

Microsoft ActiveX Control Pad Setup	
Microsoft ActiveX Control Pad Setup	
and the second	
Microsoft ActiveX Control Pad Setup	
To start installation, click the large button.	
Complete A complete installation of Microsoft ActiveX Control Pad.	
Folder: C:\Program Files\Active\Control Pad Change Eolder	
Egit Setup	

10. Click the '**Continue**' button.

Microsoft ActiveX Control Pad - Choose Program Group	
Setup will add items to the group shown in the Program Group box. You can enter a new group name or select one from the Existing Groups list.	
Program Group: Microsoft ActiveX Control Pag	
Egisting Groups:	
Accessibility Accessories Administrative Tools Maintenance Microsoft ActiveK Control Pad	
Startup System Tools Windows PowerShell	
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11. Click the 'OK' button to finish the installation.



You can now install the FAS software. Installation of the FAS software can be done before or after the ActiveX Control Pad installation.

## Step 3: FAS Facial Photographic Analysis Software version 2.1 (2016) Installation Instructions

(Please read this <u>ENTIRE</u> document before installing the FAS software to prevent loss of data.)

Below are important instructions and guidelines for installing the FAS Facial Photographic Analysis Software. We encourage you to share these instructions with your Computer Support Personnel.

## Fundamentals Regarding Version 2.0 and 2.1

- 1. By default, the software installation program loads the software in a FAS folder off the C: drive C:\FAS
- 2. The software installation program creates the following folder tree (Fig. 1)





- 3. The data you generate from analyzing photographs is stored in a database that comes with the software.
- 4. When you install the software, the database is assigned the default name **data2012.fas** and is placed in the following path off the C drive: C:\FAS\Data\data2012.fas

- 5. After you install the software, you can assign any name to this database as long as it ends in **.fas**. You can also store the database anywhere on your computer. You can create more than one database to store your photo analysis data.
- 6. After you have analyzed some photos, it is recommended you back-up your data2012.fas database periodically for safekeeping. The software allows you to do this with the click of the mouse. When you do this, the software creates a copy of your data2012.fas, names it data2012.bak, and stores it in the folder above called Backup (Fig 1 above).
- 7. Your photo images are NOT stored directly in the software's <u>database</u>. Your photo images are stored wherever you decide to store them on your computer. You may choose to store them in the folder created by the software called Images (Fig 1). When you open a photo into the software for analysis, <u>the software stores the current location (or path) of the photo on your hard drive in the database</u>. This allows the software to locate the photo if you choose to evaluate it again. <u>If you move the photo on your hard drive after you have analyzed the photo, the software will not know where to find the photo</u>. The database only stores the original location (path) of the photo. So, it is important to decide where on your hard drive you are going to store your photos BEFORE you begin any photo analysis.
- 8. You are welcome to load this software on more than one computer for your use.
- 9. We cannot provide software support. We recommend you involve your IT support personnel when installing this software.

Before you install Version 2.1 (2016) of the FAS software, you should first decide if this is a **NEW** installation, an **UPGRADE** installation from Version 1.0 (2003) or Version 2.0 (2012) or a **RE-NSTALLATION** of Version 2.1.

- If you are installing the FAS software on a computer <u>for the first time</u>, follow the **NEW** installation instructions below.
- If your computer already has any version of the FAS software installed on it and you **DO** wish to retain your previous photo analysis data, follow the **Upgrade/Re-Install** instructions on the next page.

# **New Installation Instructions**

1. When you purchased the FAS software, you received an electronic folder (FAS2016) that contains the software files. To begin the installation, open the folder and double-click on the **setup.exe** file.

FAS2016	Туре
System32	File folder
	File folder
🐻 0x0409.ini	Configuration settings
🚮 Autorun.inf	Setup Information
😽 FAS Software.msi	Windows Installer Package
📧 setup.exe	Application
Setup.ini	Configuration settings

- 2. Follow the installation instructions as they are presented to you.
- 3. The FAS Facial Photographic Analysis Software is now ready to use. The Software instruction manual can be obtained by clicking on the Help button in the software.

# **Upgrade/Re-Install Installation Instructions**

To upgrade your current Version 1.0 (2003) or 2.0 (2012) software to Version 2.1 (2016), or to re-install Version 2.1 over your current Version 2.1 that quit working, you will be instructed to uninstall your current version and then install the new 2.1 version. BUT BEFORE YOU UNINSTALL YOUR CURRENT VERSION, you must first back up any databases, back-up databases, and images that you may have stored in the Software's Data, Backup, and Images Folders (see Fig 1 above). When you uninstall your current software, the data.fas or data2012.fas databases that store your photo analysis data in the Software's Data folder will be deleted. The data.bak or data2012.bak databases in the Software's Backup folder and any images in the Software's Images folder will be preserved. But just to be safe, we recommend you back-up all of these files before uninstalling your current Version 1.0, 2.0 or 2.1 software. Follow the steps below to begin this process.

## Upgrade Step 1: Backup and rename your current (Version 1.0, 2.0 or 2.1) FAS software database

1. If your current FAS software is Version 1.0, the FAS software database is located in C:\Program Files\FAS\Data\ and is named **data.fas**.

If your current FAS software is Version 2.0 or 2.1, the FAS software database may be located in the default directory C:\FAS\Data\ and may have the default name **data2012.fas** (See Fig. 1 above).

These are the databases that store all of the photo analysis data you generated using Version 1.0, 2.0 or 2.1.

Please copy your **data.fas** file (from Version 1.0) or your **data2012.fas** file (from Version 2.0 or 2.1) to your Desktop or a directory of your choice. Make a note where you placed it. Rename the data file so it is easy to remember (for example **dataORIGINAL.fas** or **data2012ORIGINAL.fas**), but the file name must end in **.fas** Again, you are moving this **.fas** file to another location on your hard drive and renaming it to protect it. When you uninstall your Version 1.0, 2.0 or 2.1 software, the uninstall program will delete the FAS\Data\ directory where your data.fas or data2012.fas database had been stored.

## Upgrade Step 2: Backup and rename your current (Version 1.0, 2.0 or 2.1) FAS backup database(s).

 If your current FAS software is Version 1.0 and you chose to create one or more backup databases, the FAS software backup database(s) are located in C:\Program Files\FAS\Data\Backup\ and are named <date>data.bak.

If your current FAS software is Version 2.0 or 2.1 and you chose to create one or more back up databases, the FAS software backup databases are located in the default directory C:\FAS\Data\Backup and may have the default name **data2012.bak** (or any name you chose followed by .bak) (See Fig 1 above).

These are backup databases you may have created that store all of the photo analysis data you generated using Version 1.0, 2.0 or 2.1.

Please copy your **data.bak** file(s) (from Version 1.0) or your **data2012.bak** file(s) (from Version 2.0 or 2.1) to your Desktop or a directory of your choice. Make a note where you placed them. Rename the data files so it is easy to remember (for example **dataORIGINAL.bak** or **data2012ORIGINAL.bak**), but the file name must end in **.bak**. Again, you are moving these **.bak** file(s) to another location on your hard drive and renaming them to protect them. When you uninstall your Version 1,0, 2.0 or 2.1 software, the uninstall program will preserve the FAS\Data\Backup directory where your data.bak or data2012.bak databases had been stored, but just to be on the safe side, we recommend you protect these files as described above.

## Upgrade Step 3: Backup your current images (digital photographs).

1. If you stored your digital facial photographs in either of the following image directories:

C:\Program Files\FAS\Images (for Version 1.0) or

C:\FAS\Images (for Version 2.0 or 2.1) (see Fig 1 above);

make a backup copy of the photos and place them in a folder on your Desktop or in another directory. Make a note where you placed the folder containing your digital facial photographs. You are moving these images to another location on your hard drive to protect them. When you uninstall your Version 1.0, 2.0 or 2.1 software, the uninstall program will preserve the FAS\Images directory where your images may have been stored, but just to be on the safe side, we recommend you protect these images as described above.

## Upgrade Step 4: Uninstall the current (Version 1.0, 2.0 or 2.1) FAS software.

1. Uninstall the current FAS Version 1.0, 2.0 or 2.1 software via the Windows control panel.

## Upgrade Step 5: Install the latest (Version 2.1) FAS software.

- 1. Install the FAS Version 2.1 software following the "New Installation Instructions" above on page 13.
- 2. A new blank database called **data2012.fas** will be created in the C:\FAS\Data\ directory by default (See Fig 1 abover). This is the database where your new photo analysis data will be stored.

### Upgrade Step 6: Select the Database.

If you wish to use your previous database from Version 1.0 (e.g., the database you renamed to **dataORIGINAL.fas** that has all your previous photo analysis data in it), or if you wish to use your previous database from Version 2.0 or 2.1 (e.g., the database you renamed to **data2012ORIGINAL.fas**), follow these steps:

1. Start the Version 2.1 FAS software by clicking on the LaunchFAS.exe icon that is visible when

you click on the Windows Start button

on the bottom left corner of your monitor.

- Open the "Options" screen (see Figure 2) from the top menu bar. To do this click on Tools, then click on Options. Notice the default Database File is C:\FAS\Data\data2012.fas. data2012.fas is an empty database waiting for new photo analysis data. If you wish to use the newly installed blank database (data2012.fas), your installation is complete.
- 3. If, however, you wish to use your previous database from Version 1.0 (e.g., the database you renamed **to dataORIGINAL.fas** in Upgrade Step 2 above) or the previous database from Version 2.0 or 2.1 (e.g., the database you renamed **to data2012ORIGINAL.fas** in Upgrade Step 2 above), click on the Database File browse button in the Options window (See Figure 2). Browse to the location on your hard drive where you placed your previous **dataORIGINAL.fas** database or **data2012ORIGINAL.fas**, select it, and click Open. The path to your previous database will now appear in the Database File window.
- 4. Restart the FAS software to activate this new database selection.

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C Bullseye	Color			
C Cross -	Zoom Level for Photo			
Normal	50%			
Data Backup Directory				
Data Backup Directory				
C:\FAS\Data\Backup				
Image Directory				
C:\FAS\Images				
Race Calculation File Update Directory				
C:\FAS\RaceCalc				
	<u>O</u> K			

Figure 2. Options screen from the Tools Menu.

## Upgrade Step 7: Importing the new palpebral fissure length formulas into your Version 1.0 database.

FAS Version 1.0 Software came with palpebral fissure length (PFL) formulas for only two races (Caucasian and African American). FAS software Versions 2.0 and 2.1 come with PFL formulas for two additional races (Canadian and Scandinavian). These formulas are stored in the same database where your photo analysis data will be stored.

FAS Version 2.0 and Version 2.1 software programs install a new blank database called **data2012.fas** that already contains the palpebral fissure length formulas for all four races. If you chose to use your previous database from Version 1.0 (e.g., the one you renamed to **dataORIGINAL.fas** as instructed in Upgrade Step. 2), you will need to import the new Canadian and Scandinavian PFL formulas into your previous **dataORIGINAL.fas** database.

- 1. Open the Version 2.1 FAS software.
- 2. It is assumed you followed Upgrade Step 6 above and told the software to open your Version 1.0 database. To confirm, the entry in the Database File box in Figure 2 above should read C:\FAS\Data\dataORIGINAL.fas.
- 3. Click on the menu item: Data/Logs  $\rightarrow$  Database Management  $\rightarrow$  Import New Racial Calculations.
- 4. On the **Select File for Update** dialog box, select **the Canadian Male.rcf** file located in C:\FAS\RaceCalc\ and click the **Open** button. (See Figure 3)
- 5. A message box will appear showing "New racial calculations have been successfully imported". Click the **OK** button.
- 6. Repeat step 3, but this time select the **Canadian Female.rcf** file and click the Open Button.
- 7. A message box will appear again confirming the upload. Click the **OK** button. (See Figure 3)
- 8. Click on the menu item: Data/Logs  $\rightarrow$  Database Management  $\rightarrow$  Import New Racial Calculations.
- 9. On the **Select File for Update** dialog box, select **the Scandinavian Male.rcf** file located in C:\FAS\RaceCalc\and click the **Open** button. (See Figure 3)
- 10. A message box will appear showing "New racial calculations have been successfully imported". Click the **OK** button.
- 11. Repeat step 3, but this time select the **Scandinavian Female.rcf** file and click the Open Button.
- 12. A message box will appear again confirming the upload. Click the **OK** button (See Figure 3).
- 13. Re Start the FAS Software. The upgrade is now complete.

14. Your FAS Version 2.1 software is now configured to use your previous Version 1.0 **dataORIGINAL.fas** database and your previous Version 1.0 database now has all four sets of PFL formulas (Caucasian, African American, Canadian, and Scandinavian) loaded into it.



Figure 3. Formulas for new Canadian and Scandinavian PFL Charts.