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Connecting Care • Creating Community

GreaseMonkey Webinar – September 25, 2021

Speakers: Drs. John Robertson, John Yap, Stan Hurwitz

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Disclosures:

- Dr. John Yap: GP in New Westminster, OSCAR BC president (volunteer). EMR OSP is WELL/KAI. OSCAR BC subscriber. eFORM generator. Wannabe programmer! GreaseMonkey script USER! No financial conflicts.

- Dr. John Robertson: Ob-Gyn in Chilliwack. EMR OSP is OpenOSP. Volunteer OSCAR (OCUS, World Oscar) Librarian. eFORM creator. GreaseMonkey user. No financial conflicts.

- Dr. Stanley Hurwitz: GP in Richmond, amateur programmer. EMR OSP is Juno.

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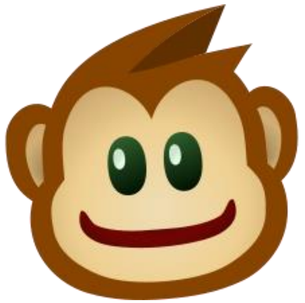
What is GreaseMonkey – Wikipedia:



Greasemonkey is a userscript manager made available as a Mozilla Firefox extension. It enables users to install scripts that make on-the-fly changes to web page content after or before the page is loaded in the browser (also known as augmented browsing).

The changes made to the web pages are executed every time the page is viewed, making them effectively permanent for the user running the script.

Greasemonkey can be used for customizing page appearance, adding new functions to web pages (for example, embedding price comparisons within shopping sites), fixing rendering bugs, combining data from multiple web pages, and numerous other purposes.

Greasemonkey was initially met with complaints by publishers for its ability to block ads.

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But in plain language – what does it really do?

- Change your display – e.g. Lab Row Display, sorted alphabetically
- Enhance demographic info on the eCHART page
- Allow for recompilation of multi-line invoices (private and MSP)
- Create short-cuts – to eFORMS, Measurement Groups, external websites
- Reduce number of clicks to complete functions
- Add preset text to input fields (autohotkey, text-expander type function)

- Proof of concept for end-user features that hopefully will inspire the real developers to incorporate into the “trunk” of OSCAR

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What does an GM script look like? (snippet from “Booking Screen Confirm MRP”)

```
// ==UserScript==
// @name Booking Screen Confirm MRP
// @namespace   PMscripts
// @description  Highlight if booking with non-MRP
// @include     *appointment/addappointment.jsp*
// @require   https://ajax.googleapis.com/ajax/libs/jquery/1.3.1/jquery.min.js
// @version 1.0
// ==/UserScript==


booking = $('div.title').html();
booking = booking.substr(booking.indexOf("(")+1);
booking = booking.substr(0, booking.indexOf(")"));
booking = booking.split(" ");

MRP = $("div.label:contains('Doctor:')").next().children().val().split(" ")[0];
MRP = MRP.replace(",", '');
MRP = MRP.replace(" ", '');

if(MRP.length > 0){
 contains=false;

 for(i=0; i<booking.length; i++){
  if(booking[i] == MRP){
    contains=true;
    break;
  }
 }

 if(!contains){

   alert("ALERT: MRP Mismatch");
   /*
   var match = document.createElement("div");

}
```

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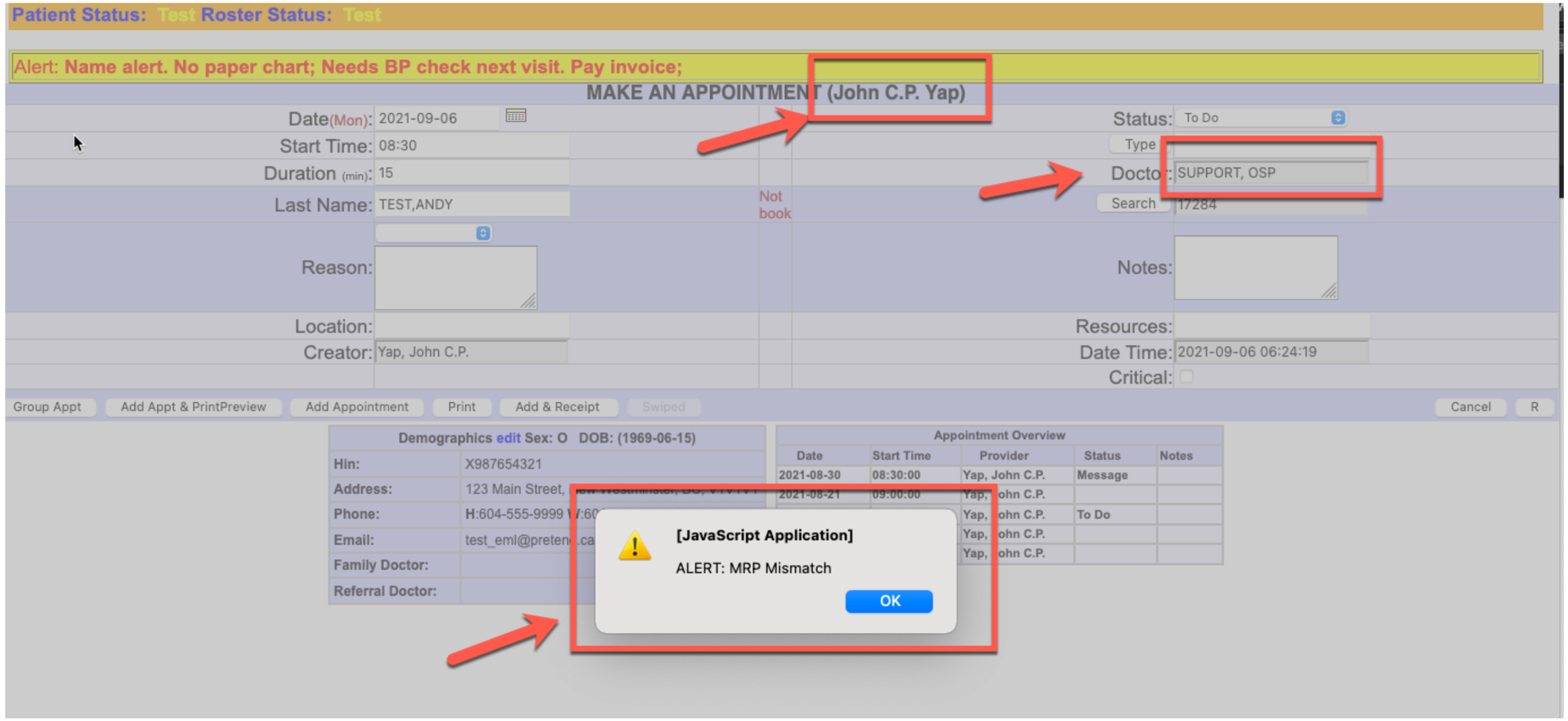
Booking Screen Confirm MRP



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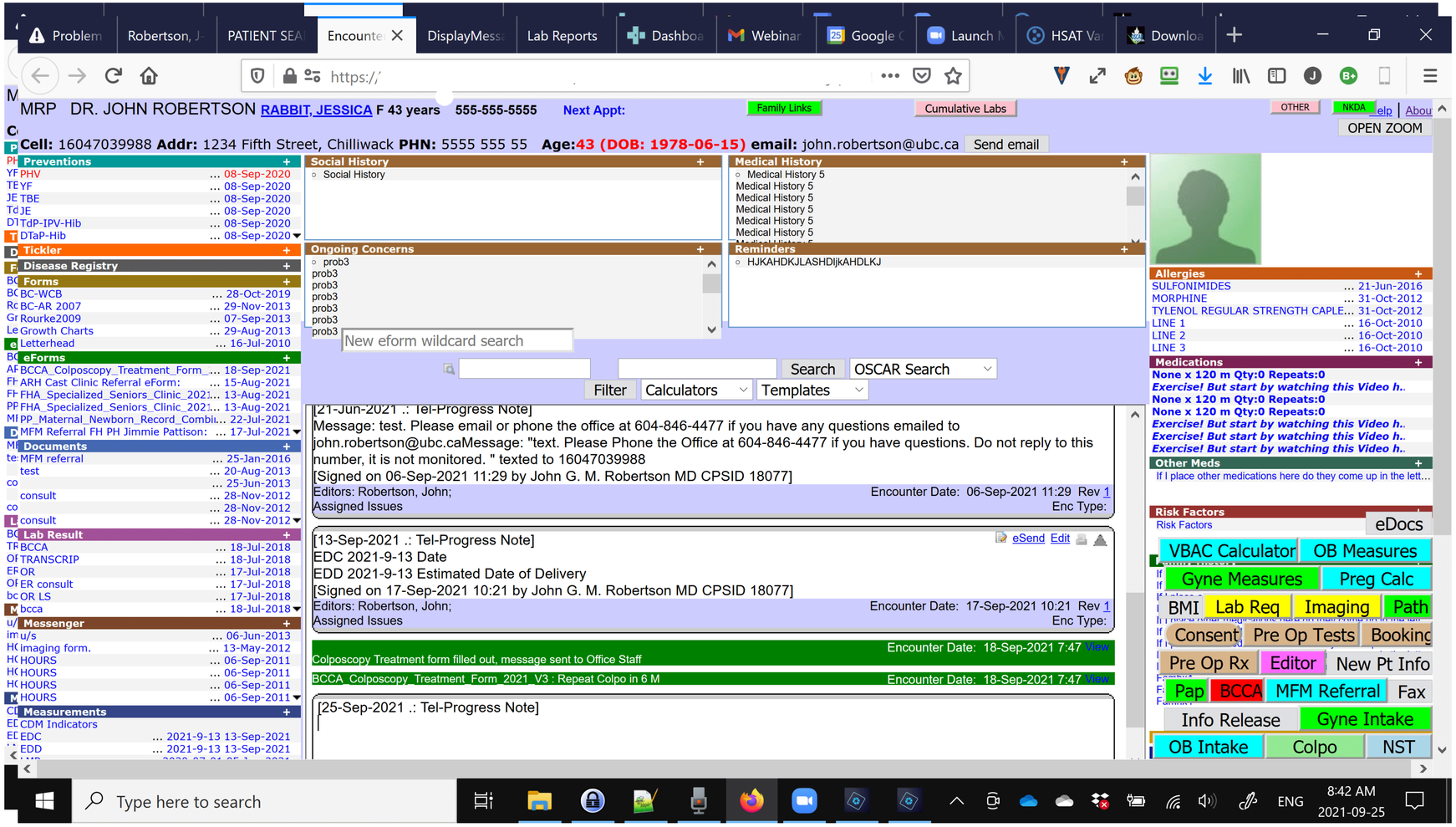
Encounter Screen GM



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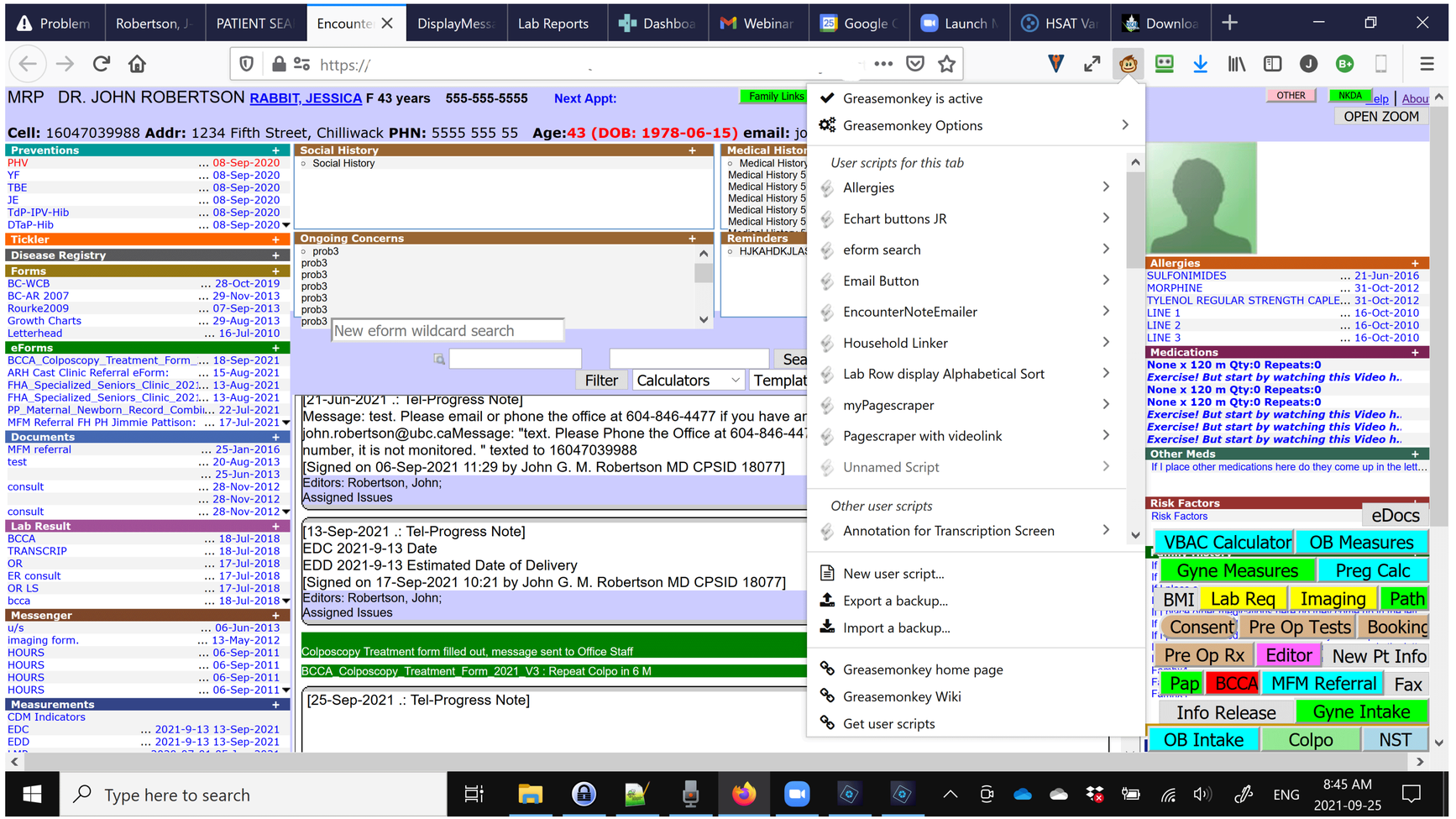
Encounter Screen GM



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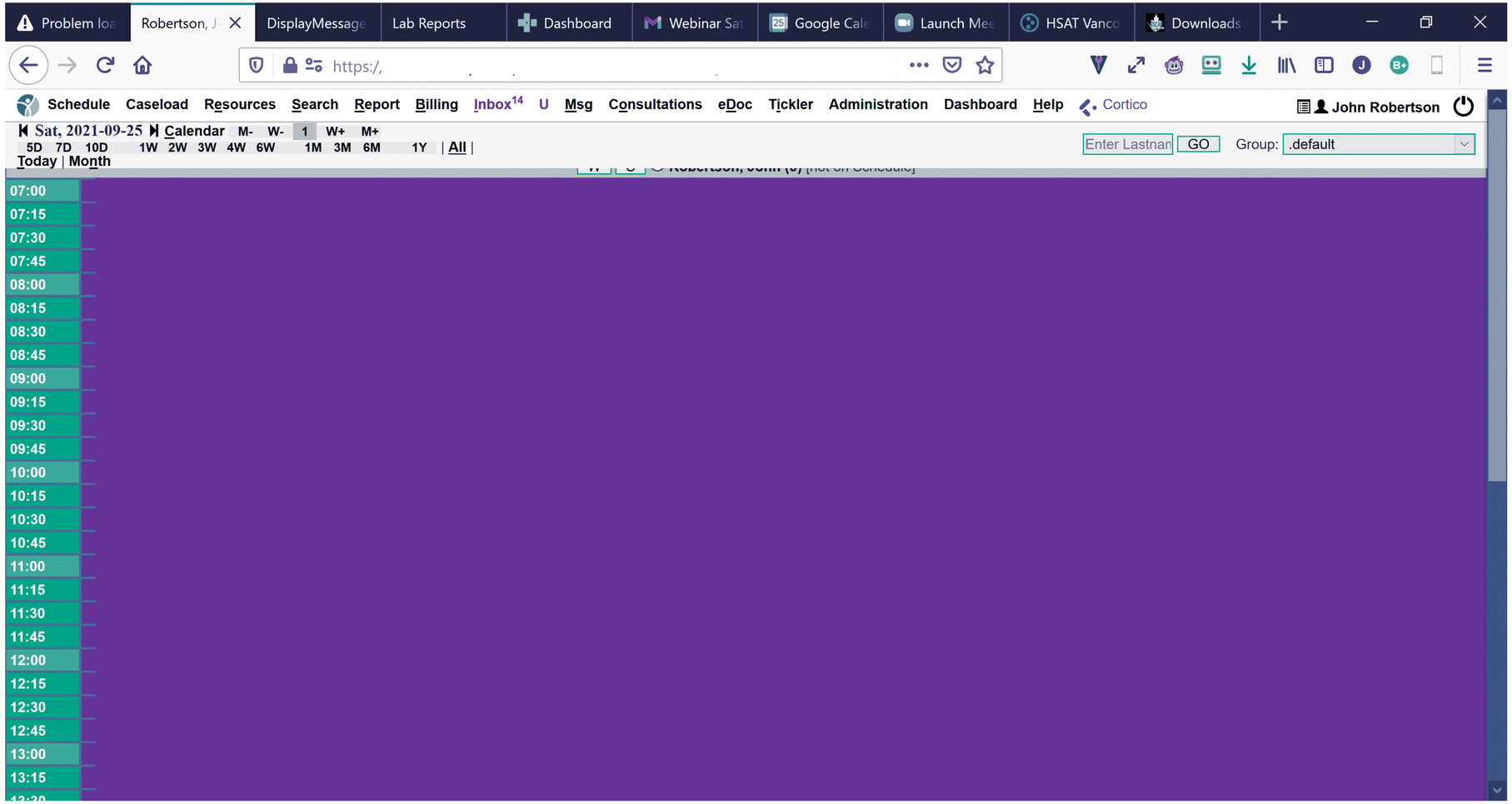
Schedule Screen GM



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What does an eFORM script look like? (snippets from “Kamloops Cardiology Associates”)

```
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<!-- V1_Jun11_2019: Kamloops Cardiology Associates - created for Exeter Clinic, 100 Mi House; Dr. John Yap -->
<!-- V2_Sep6_2021: major updates to 2021 standards; Dr. John Yap -->
.....
<script>
// For OSCAR to detect what files to include in the generated ZIP, the
// filename must appear in the HTML document within quotation marks, with the ${oscar_image_path} in front of it;
// this serves as a workaround to force the files to be included for ZIP exports.
// Allows for appropriate import of all png files that are not referenced by BGImage tags
// Place any needed image or js file names within the script tabs, inside double quotations, and to the right of the double slashes
// "${oscar_image_path}Kamloops_Cardiology_Associates_referral_form.png"
// "${oscar_image_path}CreativeCommonsIcon.png" // for Copy Left footer
</script>

<!-- Freeform Signatures -->
<script type="text/javascript" src="${oscar_image_path}jSignature.min.js"></script>
<!-- Xbox styling -->
<style type="text/css">
.box1 {
position: absolute;
width: 15px;
height: 15px;
font-size: 15px;
border: 1px solid #000000;
cursor: pointer;
font-weight: bold;
text-align: center;
background: aquamarine;
}
<script language="javascript" type="text/javascript">
/*****************************
startup functions
*****************************/
function startUp() {
// new off-line architecture as per K Yap
setDocumentTitle("Kamloops_Cardiology",document.getElementById('PatientNameL').value);
changeImage("Kamloops_Cardiology_Associates_referral_form.png", "BGImage1");
changeImage("CreativeCommonsIcon.png", "CreativeCommons"); // for Copy Left footer

<!-- Patient Info -->
<textarea name="patient_name" id="patient_name" type="text" class="noborder" style="position:absolute; left:175px; top:215px; width:265px; height:34px; font-size:16px; background:white;"
oscardb=patient_name></textarea>
<input name="HIN" id="HIN" type="text" class="noborder" style="position:absolute; left:505px; top:219px; width:190px; font-size:16px; background:transparent;" oscardb=HIN>
```

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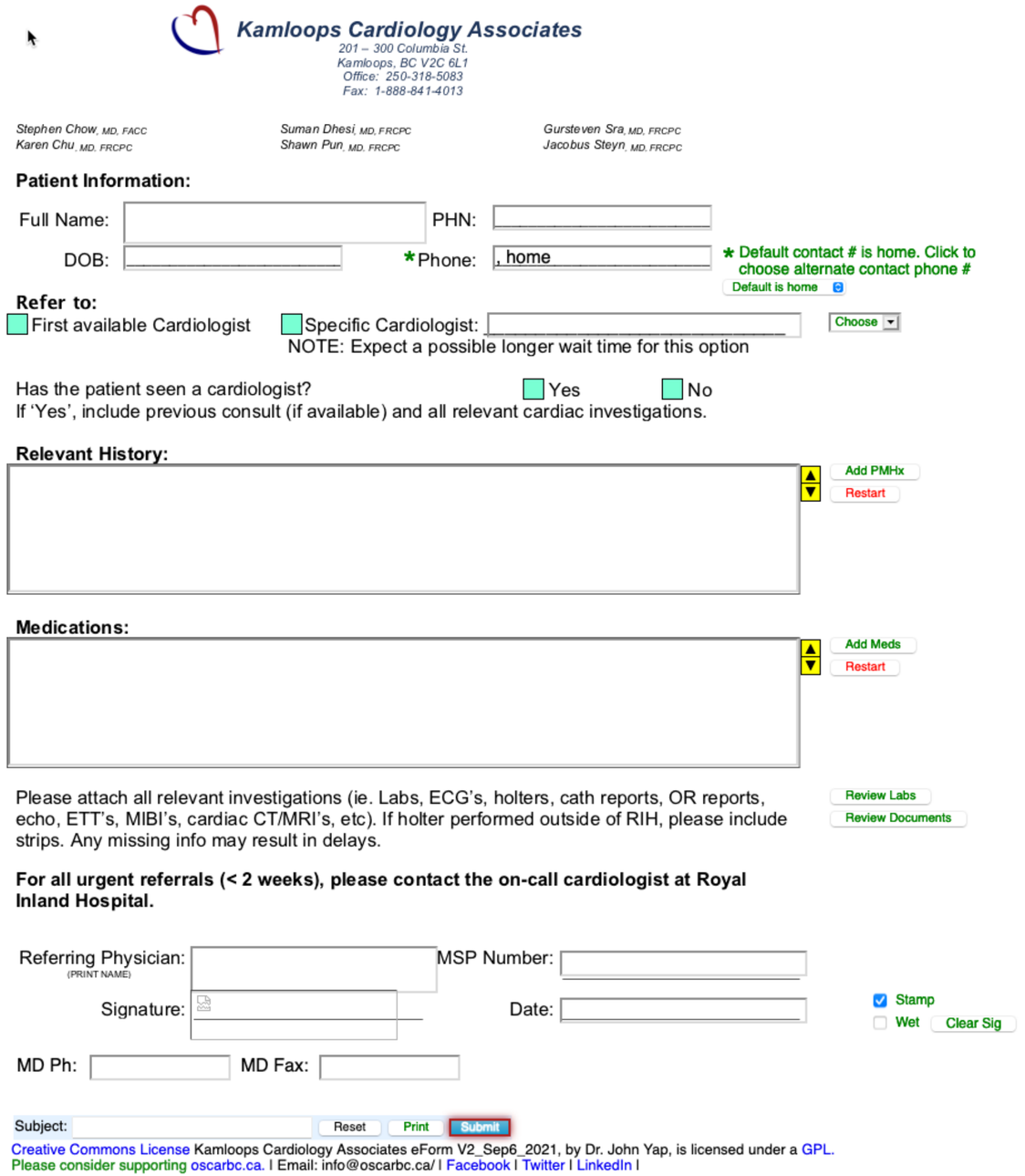
Kamloops Cardiology Associates



Kamloops Cardiology Associates

201 – 300 Columbia St.
Kamloops, BC V2C 6L1
Office: 250-318-5083
Fax: 1-888-841-4013

Stephen Chow, MD, FACC
Karen Chu, MD, FRCPC
Suman Dhesi, MD, FRCPC
Shawn Pun, MD, FRCPC
Gursteven Sra, MD, FRCPC
Jacobus Steyn, MD, FRCPC

Patient Information:

Full Name: PHN:

DOB: *Phone: , home

* Default contact # is home. Click to choose alternate contact phone #

Default is home

Refer to:

First available Cardiologist Specific Cardiologist: Choose

NOTE: Expect a possible longer wait time for this option

Has the patient seen a cardiologist? Yes No

If 'Yes', include previous consult (if available) and all relevant cardiac investigations.

Relevant History:

Add PMHx
Restart

Medications:

Add Meds
Restart

Please attach all relevant investigations (ie. Labs, ECG's, holters, cath reports, OR reports, echo, ETT's, MIBI's, cardiac CT/MRI's, etc). If holter performed outside of RIH, please include strips. Any missing info may result in delays.

Review Labs
Review Documents

For all urgent referrals (< 2 weeks), please contact the on-call cardiologist at Royal Inland Hospital.

Referring Physician: (PRINT NAME) MSP Number:

Signature: Date:

Stamp
Wet Clear Sig

MD Ph: MD Fax:

Subject: Reset Print Submit

Creative Commons License Kamloops Cardiology Associates eForm V2_Sep6_2021, by Dr. John Yap, is licensed under a GPL.
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Essential GM scripts? Too many!!

- Pagescraper – multiple variations
- eCHART buttons
- eFORM wild card search (even better than the original Awesome Search Box)
- Tickler Set Default, SendTo, Tasks
- Invoice screen
- Calendar Jump – move forward by weeks or months
- Text/eMail with Twilio/MailChimp
- Quick Links
- Not assigned page (InBox)
- Annotation for transcription (InBox)
- Transcription highlight (copy and paste)
- Billing screen defaults (lock Payee, location, etc)
- Demographic copy
- Household Linker
- Invoice screens (multiple)
- Lab Row display (alphabetical sorting)

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That's GREAT! So why doesn't my OSP install them for me?!

The ugly truth:

- GM scripts work in FireFox, not in Chrome (Tamper Monkey)
- GM has been known to fail after FireFox upgrades (security issues?)
- GM itself upgrades (security issues!) and some existing scripts may fail after upgrade
- GM assumes all OSCAR instances are the same – they are NOT!
- Your preferred window size affects how GM displays (position)
- If there is a problem with your GM script, your OSP is unlikely to assist, because it is OUTSIDE of OSCAR

- All the more reason that these essential features get incorporated into OSCAR for all to use. "It should have been this way in the first place!"

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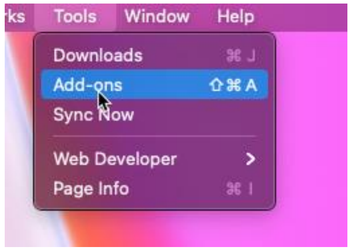
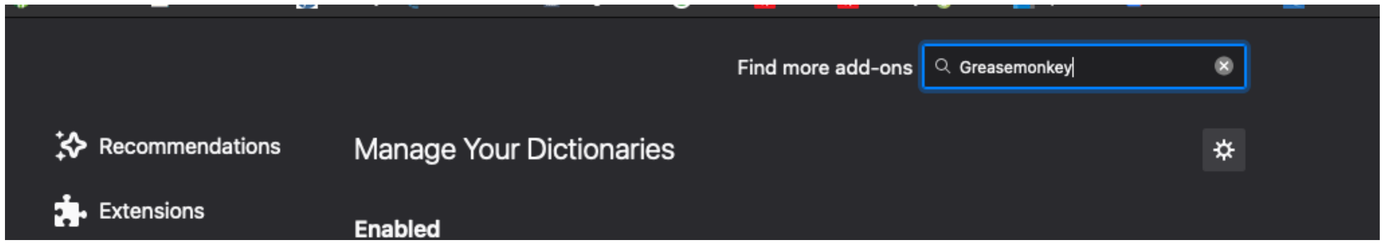
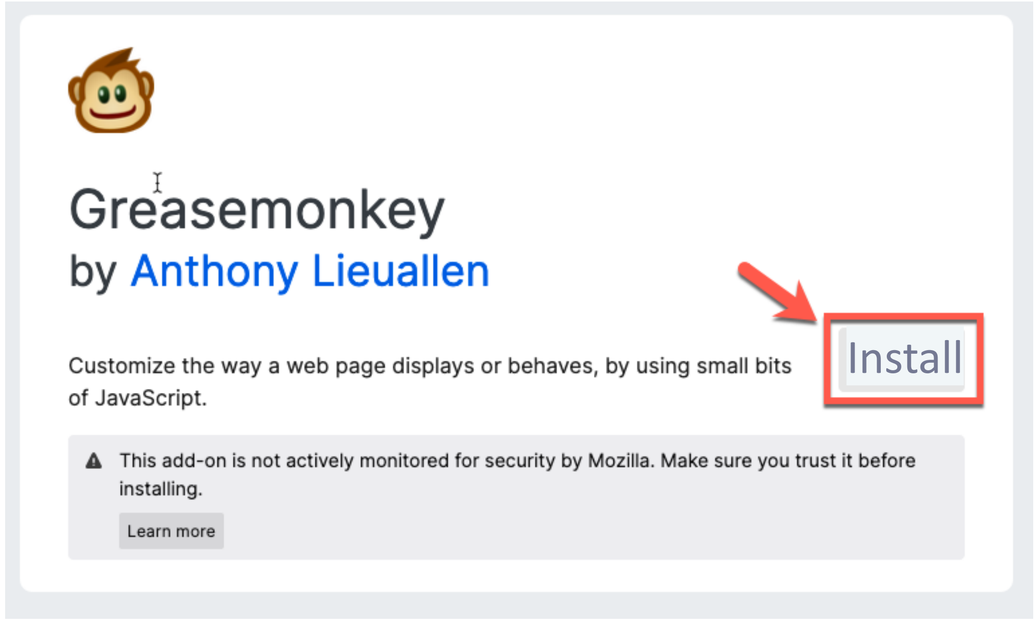
Getting GreaseMonkey (Mac view)







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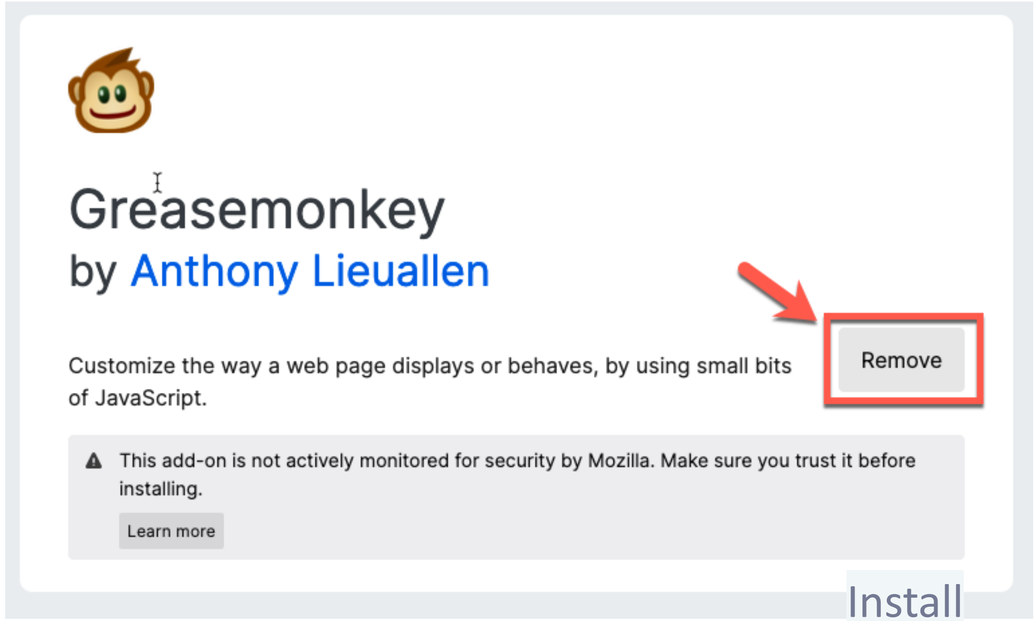
Getting GreaseMonkey (Windows view)



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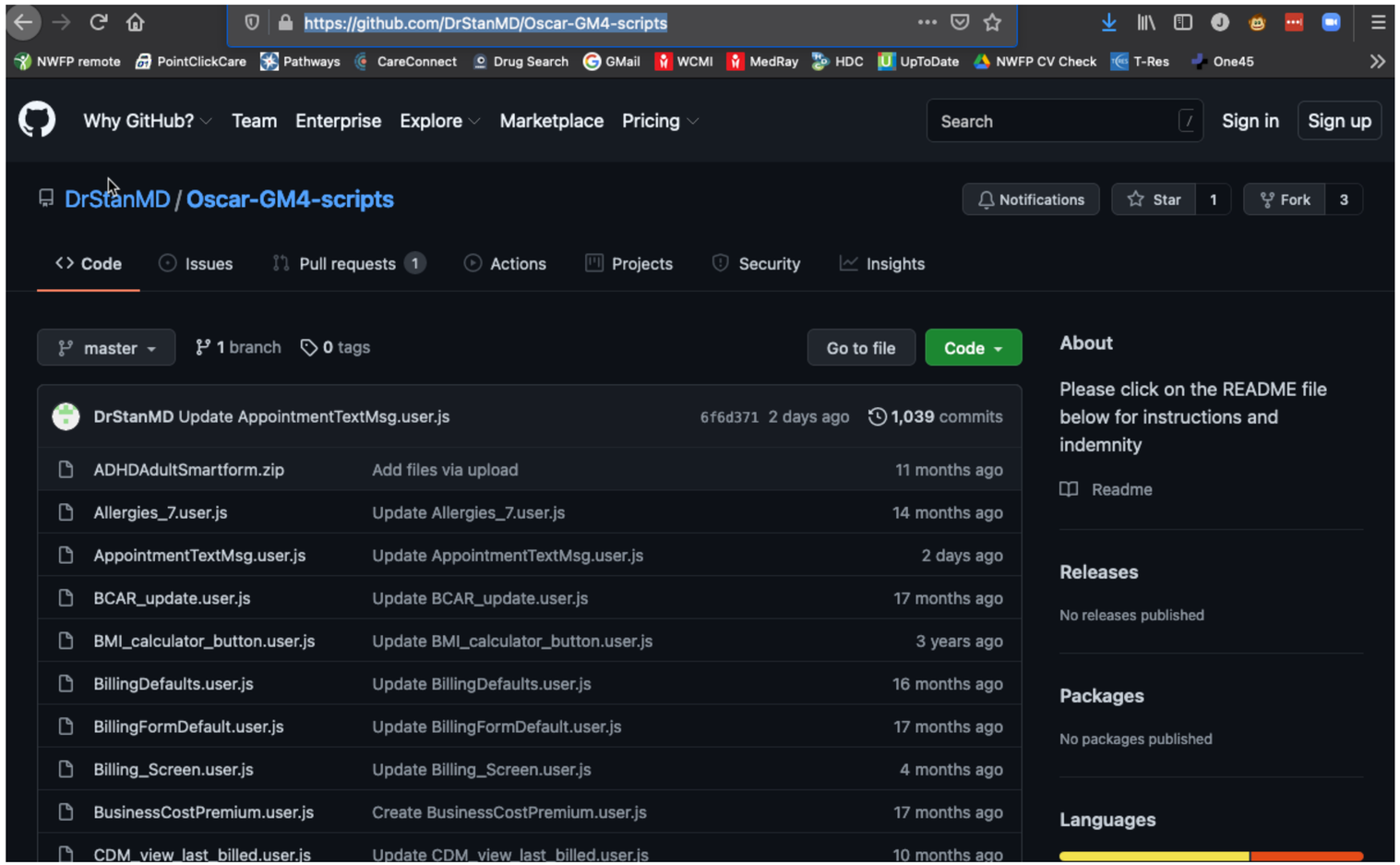
Getting GreaseMonkey Scripts: the jackpot!

https://github.com/DrStanMD/Oscar-GM4-scripts



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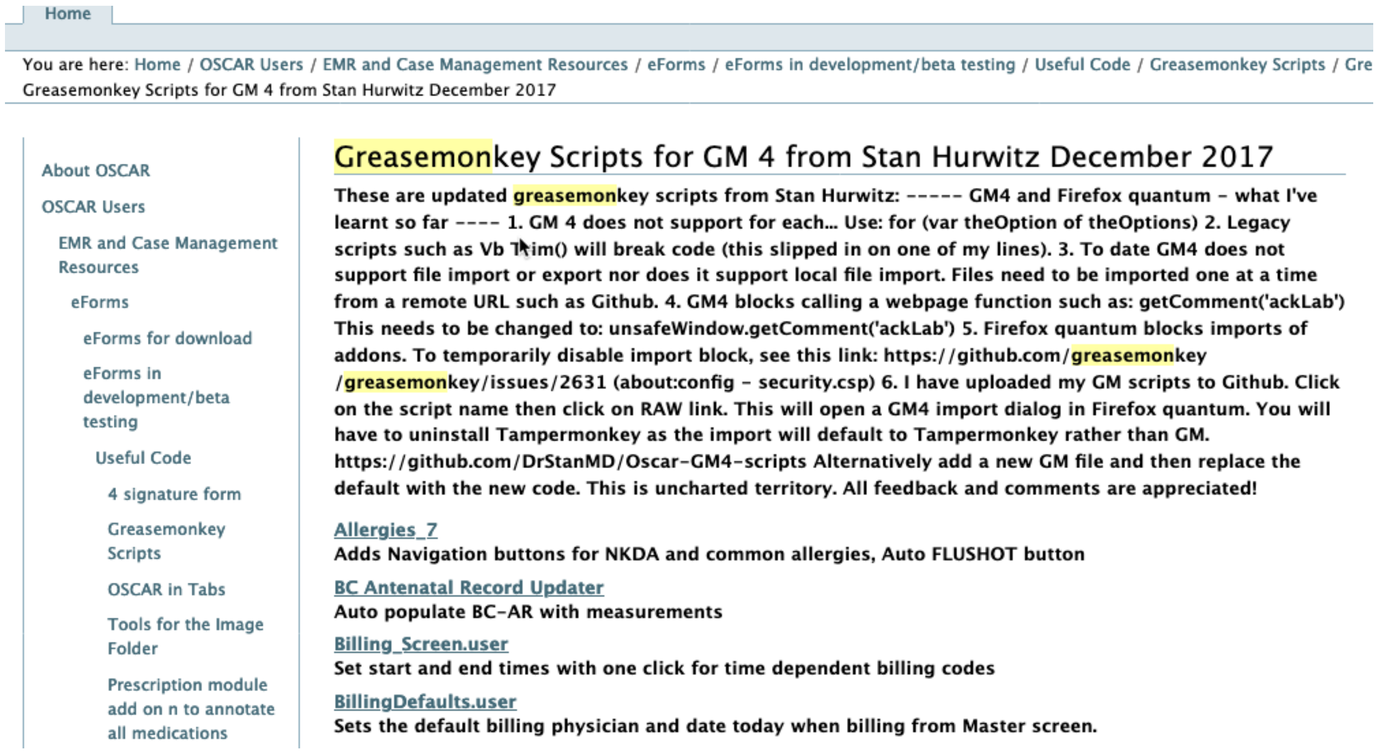
Getting GreaseMonkey Scripts: Oscarcanada.org

http://oscarcanada.org/oscar-users/emr-resource/eform/eforms-in-development-beta-testing/useful-code/greasemonkey-scripts/greasemonkey-scripts-for-gm-4/greasemonkey-scripts-for-gm-4-from-stan-shaw-december-2017



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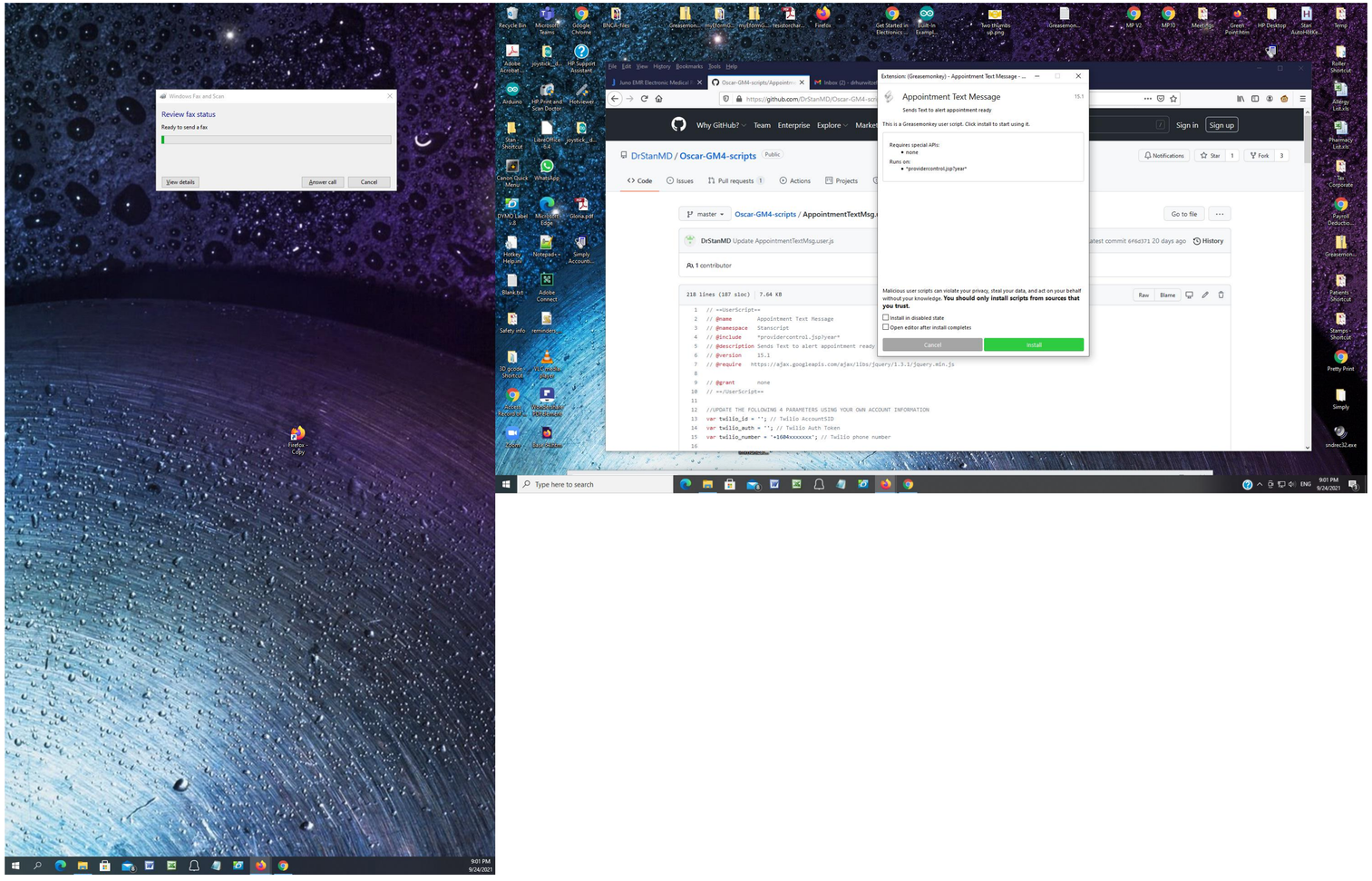
Downloading GreaseMonkey Scripts: from GitHub!



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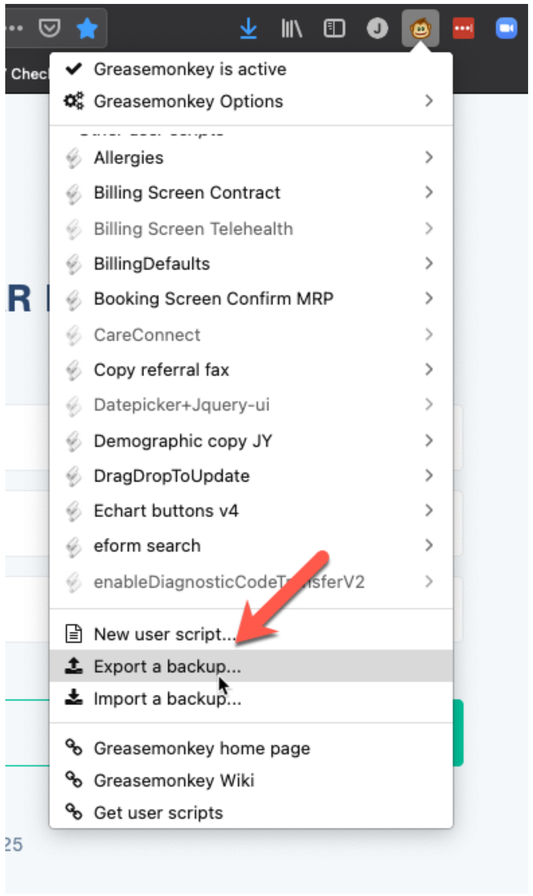
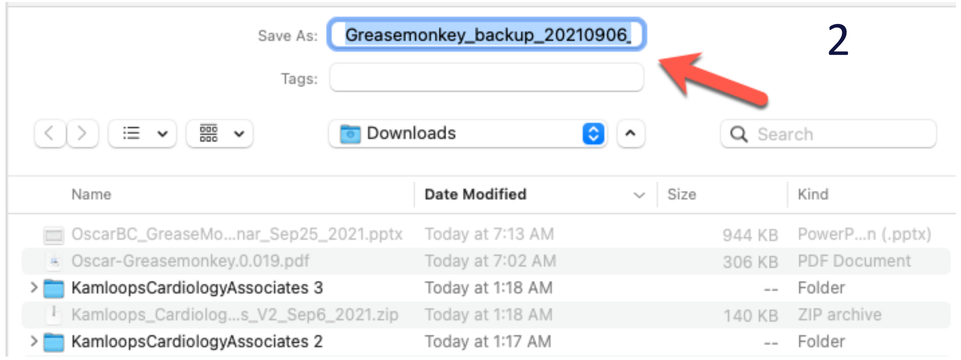
Getting GreaseMonkey Scripts: from trusted fellow GM users!

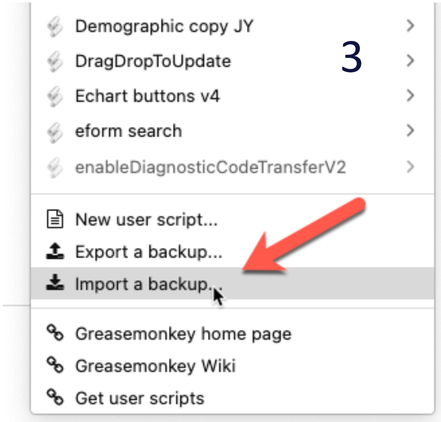
1



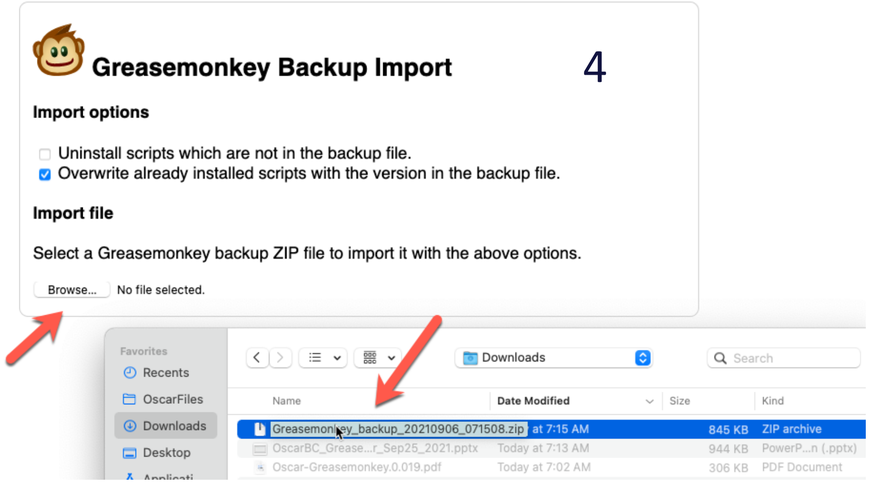
2



3



4



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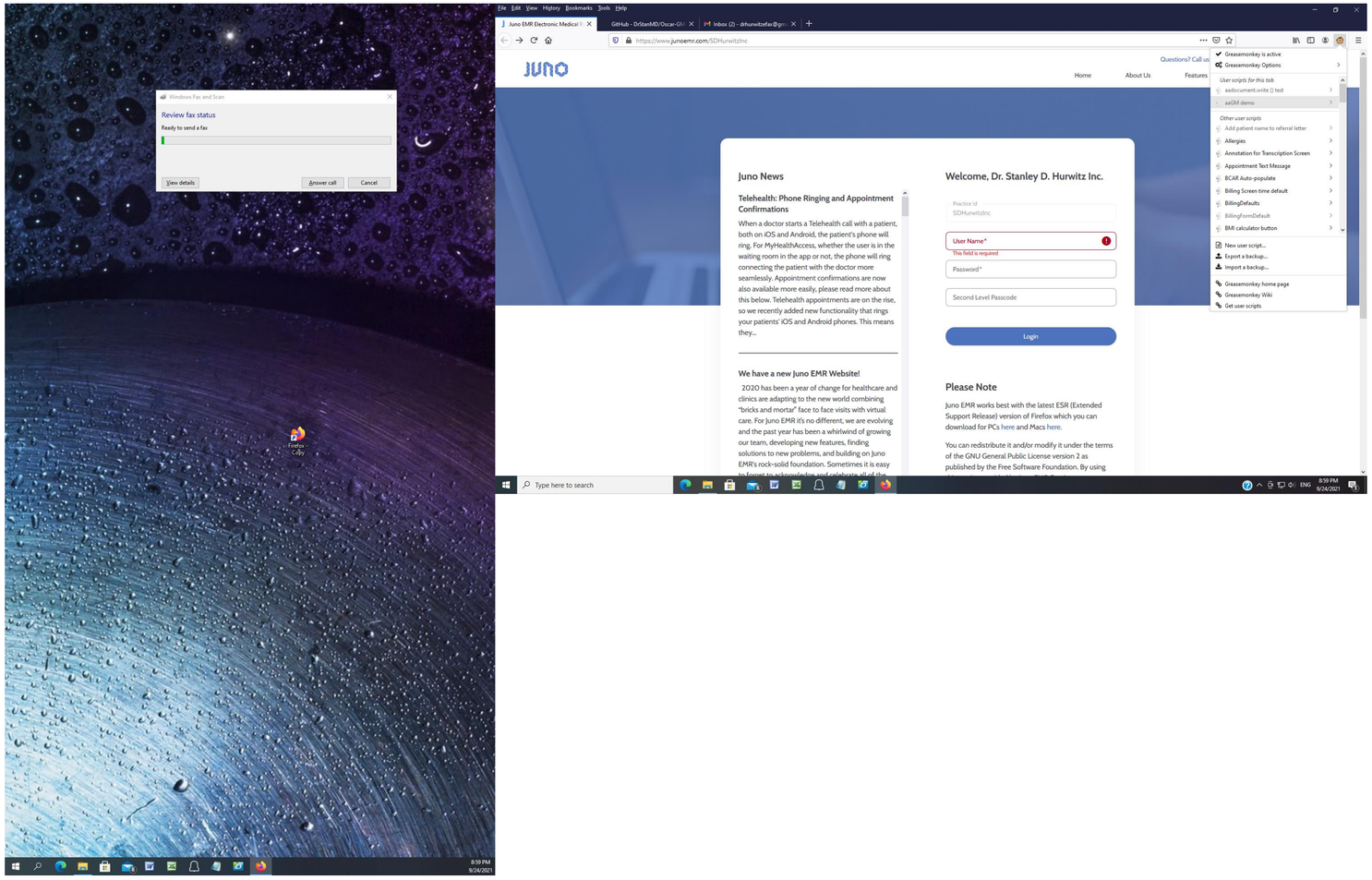
Your library of GM scripts – under the “monkey”



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Other resources for the GM keeners:

https://github.com/DrStanMD/Oscar-GM4-scripts/blob/master/Greasemonkey%20Cheat%20Sheet.txt

https://www.w3schools.com/js/

https://stackoverflow.com/

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Demo Time!

- John R, John Y, Stan H

Simple customizations

- Reposition
- Resize
- Change colour
- Other?

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