## Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and related technology. Our aim is to provide an exchange of information between users of digital devices. We are not in any way affiliated with any computer manufacturer or software company, and *we do not sell your data or email address*.

## Program Meetings

*No admission fee for non-members. Everyone is welcome!* Second Tuesday of every month, except September, from 6:30pm – 8:30pm.

Help's Half Hour (Q & A) 6:30pm – 7:00pm. *Members and Guests are welcome to attend and bring their computer related questions with them to get answered*.

7:00 – 7:15, Club Business

7:15 – 8:30+, Main Presentation

Come and join in the fun and enjoy a snack! **You are welcome to bring a guest**.

### Become a Member

Go to our website, www.rcsi.org, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

The *Monitor* is published monthly by members of RCSI. Articles by our members may be reprinted by other user groups or nonprofits, without special permission. A courtesy copy may be emailed to the author or Monitor editor.

# The Rochester Computer Society, Inc.
## a computer/tech club open to everyone

# M⬜NIT⬜R

*\* \* We are back and meeting in person again \* \**

**Annual Picnic, September 14**
**'Rotary Cabin' at Camp Eastman, Irondequoit**

**October 12,** Cybersecurity Awareness Month
**presentation by Bob Gosticha, via Zoom**

**November 9, 'Gifts & Gadgets', by Arpad Kovacs**
**'TBD', by Tony Dellelo**

## In This Issue

## Thoughts from a Clicker

By Tiny Ruisch, Vice President
Cajun Clicker Computer Club

Last week at one of my Zoom meetings, someone asked me if I had ever used IrfanView, an image viewer, and editor. I replied that it was one of my go-to programs about ten years ago. This chance remark gets me thinking about some of my computing experiences over the years. Technology has sure changed a lot. One of my first computer memories was when I was still in high school and UNIVAC was in the news. No one had any idea what the thing was good for. The census used one to

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***We have stopped printing the Monitor newsletter*** *and leaving hard copies at some area computer repair shops.* Digital copies can be obtained from **www.rcsi.org** or my **Pcloud** storage at **https://tinyurl.com/tonydel-rcsi** (***this link works in PDF version only***). Also includes presentation slides and articles too large for this newsletter.

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**Some Past Presentations:**
Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
Keeping Mobile Devices Secure
3D Printing, ENABLE project
Internet Security and Privacy
Flash Drives-Not Just for Storage
Features, Mac OS X & Windows
Tablets, the Programs and Uses
Personal Finance Software
Amazing Browser Tips
Linux is Like Cars
Drones and Their Many Uses
Gifts and Gadgets for the Holidays
Cut the Cord, Streaming Services

somehow make counting the population easier.  It was a different world back then and nobody much cared about a machine that was bigger than the family car and needed a special air-conditioned room.

One thing that interested me was the Texas Instruments pocket calculator.  My daddy was a feed salesman and the company that he worked for provided him with one of these expensive machines.  I remember him getting it out to show us how he could add 2 and 2 without making a mistake.

When I joined the Navy, I had my first experience with using a computer.  I got to run the keypunch machine.  If I made a mistake, a ship could easily get 10,000 pounds of butter instead of 1,000.  Back then, the Navy paid us in cash.  In later years, our paychecks were an IBM computer punch card.  Now, most employers don't even issue checks.  It's all done electronically.

In the late 1970s, computers started to catch on.  IBM was the company that created the home market.  Their 8086/8088 weighed about 30 pounds and had a whole megabyte of random-access memory.  It blazed along at a speedy 4.77 MHz.  Other companies that built computers soon started advertising themselves as IBM compatible.  If you worked for IBM, you were required to wear a tie.

This is also the era when many of us hobbyists started building our first computers.  Zenith Heath Kits were all the rage.  They didn't work any better, but we were smarter because we built our own.

The operating system of choice in those days was PC-DOS.  There were many other ones, but the home market was mainly CP/M or one of the DOS systems from Apple, Atari, or Commodore.  In the early 1980s, a fellow you may have heard of buying an operating system called 86-DOS which was also known as Q-DOS (for Quick and Dirty DOS).  Bill Gates later renamed it to MS-DOS for the company that he founded.  I'm pretty sure that Microsoft is still in business today.

Home computing started to take off in the '80s when Radio Shack introduced the Trash 80 (oops. I meant TRS 80).  Apple's home computer was the Lisa and Texas Instruments had something called the TI-99.

I remember the first computer I bought.  It was a Commodore VIC20.  I loved that computer with its 5 KB of RAM and the data cassette storage, even though it often took 3-4 minutes to load a program.  Incidentally, the VIC20 was the first home computer that sold a million units.  In later years the Commodore 64 was even better.

The first innovative computer program to be sold was the spreadsheet VisiCalc.  Like so many other successful things, clones like Lotus 1-2-3, SuperCalc, and Microsoft Excel were soon on the market.  Did you know that Microsoft's Excel was first introduced for the Apple Macintosh?  It was only later that it was ported to Windows.  WordStar was the first commercially profitable word processor.

The real software revolution was the games.  I don't think you could walk 50 feet without seeing somebody playing Space Invaders, PAC Man, or one of the many variations of Pong.  I'll confess that my favorite games were made by Infocom.  They specialized in "interactive fiction" games.  I still remember their advertising slogan, "We put our graphics where the sun don't shine." Graphics adapters later put this type of adventure game out of business.  Their first game was Zork which debuted in 1980.  In the old days, the only decision to be made when you

bought a monitor was whether to have green or amber output. The only sound you could hear was the tinny beep for the operating speaker. The only mouse in the computer room lived in the wall. Printers were all dot matrix and printed about 30 characters a minute.

Of course, one of the biggest changes in computing has been the Internet and the use of e-mail. I've heard that e-mail was invented by a Nigerian that had a lot of extra money to spend. The browser choices were Mosaic or Netscape. We've come a long way from logging in to the Bulletin Board.

I'm going to shut up for this month. Please remember that I've just written about some of my computing memories, so the facts may not be 100 percent correct. I'm just amazed at how far technology has advanced.

Thanks for reading.

<div align="center">From the February 2021 issue, CCCC Computer News,
www.clickers.org, office@clickers.org.</div>

## Apps and Applications – Mobile and Desktop
<div align="right">By Phil Sorrentino, Newsletter Contributor
Sarasota Technology Users Group</div>

When we talk about computer software nowadays, we typically use the term Apps, referring to any software that is running on a computer, smartphone, or tablet. The term Applications was originally used for software other than the Operating System, but that seems to have changed over the last few years with the advent of Mobile devices - Smartphones and tablets. Also driving the change has been the migration towards the "Client – Server" architecture, where smaller Apps running in a client device (smartphone or tablet) can control a much more elaborate collection of Applications software running in a much larger server (in the cloud). Computing has been moving in this direction ever since the Internet and the World Wide Web have become available to us. The term "App" has become very popular. In 2009, technology columnist David Pogue even proposed that the new mobile Smartphones be nicknamed "App Phones". And in 2010 App was listed as the "Word of the Year" by the American dialect Society.

So, here are some definitions, at least for this discussion. A computer program is a generally structured collection of instruction sequences that perform a specific task when executed by a computer. (How's that for a "Nerdy" definition?) Software is a general term and will refer to all types of computer programs for all types of computers. An Operating System is a collection of computer programs that manage computer hardware and software resources and provides common services for Application programs. An Application program is a computer program designed to perform a group of coordinated functions, tasks, or activities for the benefit of the user, for example, a Word Processor, a Spreadsheet, an Accounting program, a Web Browser, or even a computer game. These applications are designed to run on the computer hardware with the assistance of the Operating System (like Windows10, MacOS, or

Android), which is mainly involved with managing the computer hardware.

Before the Smartphone, circa 2007, we only had Desktop Applications, because we only had Desktop computers.  Yes, I know laptops were available and they could be easily moved around, but basically, they were just portable desktop computers.  So, Desktop Applications are software programs intended to be run on a desktop (or laptop) computer.  Then came the Smartphone (and shortly later, circa 2010, the tablet), and these devices were very much different in that their screens were noticeably smaller and there was no mouse for selection/navigation, only a touch-sensitive screen.  So, applications that could be used in this new smaller environment had to be created specifically to run on a small screen using your finger as a pointer/navigation device.  These applications are software programs intended to be run on a mobile computer, a Smartphone, or tablet, with limited input and output capabilities.  So, a mobile App is a computer program designed to run on a mobile device, like a smartphone or tablet, with the assistance of the Mobile Operating System (like Android or iOS, or even Windows 10 for tablets).

Desktop applications are usually "fuller featured", whereas the Mobile App equivalent is usually smaller, "lesser featured", simpler, and may or may not be easier to use.  This should not be unexpected when you consider that most desktop Apps are built to be used with the more capable input and output devices, (a mouse, a keyboard, and a much larger display), whereas mobile Apps are intended to be used with only a finger and a much smaller screen.

With the arrival of mobile devices, many popular Desktop Applications were the basis for new mobile Apps for the new mobile devices.  Many Google desktop applications have been recreated for mobile devices.  Your Google email can be accessed from the desktop application or the mobile App.  Both devices will provide the same information from the Google email server.  But, as we have noted, Mobile Apps are different from Desktop Applications in that they have to run on a much smaller device with limited input and output capabilities.  And not only is there a display size and input/output capability difference, but the mobile devices are different way down at the hardware level, the central processing units, most of which are slower than their desktop counterparts.  So, many applications exist as both desktop and mobile versions. Microsoft Word is available in a desktop version, the one that most of us learned word processing on, and Microsoft has released a mobile version that is available for both Android and iOS devices.  This also holds for Excel and PowerPoint.   Adobe Photoshop image editor is a desktop application and Adobe Photoshop Sketch is a mobile app that lets you draw and paint on a mobile device but is a condensed version of Photoshop.

Besides the Apps that have migrated from the Desktop world, there are hundreds of thousands of Apps that have been developed for mobile devices that take advantage of the fact that these devices are mobile.  These Apps use the power of the server to provide capabilities to the user that could never have been accomplished with only the processing power of the device itself.  Maps and navigation immediately come to mind.  The memory and the processing power required for these capabilities, at

least with the current technology, would never fit into a device the size of a smartphone. And some Apps take advantage of the fact that they know your location; remember Smartphones have GPS and other techniques for location determination. For example, Glympse lets you send your current location to another device, so the user of that device will know where you are (for as long as you choose to give him that information). There are even some Apps that use your location to notify you if one of your friends (or contacts) is nearby. The capabilities that can be developed for the mobile devices have only scratched the surface. It almost looks like the software applications development emphasis has moved from desktop Applications to mobile Apps.

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### LINUX SIG

You guessed it. The library is closed, so Carl sent out a link last April to try an online meeting, using Jitsi. You might not get the total hands on approach, but you can ask questions and share screens during the meeting. The Linux Workshop will take place the **third Saturday of each month**, from Noon-4PM. No, you can't bring your machine in, but you can describe your problem and Carl and the other Linux gurus will try and help you. This is a video conference, so dress appropriately.

If you are not on the Linux emailing list, you can request a link to the workshop by contacting Carl Schmidtmann, at unixgeek@faultline.com.

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* * * * * SOFTWARE and HARDWARE * * * * *

## What's New in Windows 11?

By Bob Rankin, www.askbobrankin.com
a Translator for the Technology Impaired

I've waited a few days to write about Windows 11, because there has been a bit of confusion about exactly what it will be, when it will be available, and which computers will be able to use it. Even "official" Microsoft sources have offered up conflicting information, especially on the compatibility issue. Here's what we know about Windows 11, and my best guesses for the unknowns. Read on…

**Will Windows 11 Run on Your Computer?**

When Windows 10 was released back in 2015 (can you believe it?) it was billed as "the last Windows version," and we were told to expect twice-yearly updates. At the time, Apple's rival operating system was also at Version 10, having released "OS X" El Capitan. Updates to OS X with cool names like Sierra, Mojave, and Catalina followed in the intervening years. But then, Apple dropped the Version 11 gauntlet last November, with the Big Sur release.

One can only surmise this set off a flurry of worry in the Microsoft marketing department. "Apple has Version 11, what should we do?" (Remember now, when Windows skipped Version 9, moving from the

## Penguin Platform

By "Free John" Kennedy, Apcug Advisor, Regions 3 and 6/7

**WINDOWS 10 INSIDER PREVIEW BUILD 21364 LETS YOU RUN LINUX GUI APPLICATIONS** – Microsoft has released Windows 10 Insider Preview build 21364 that brings several new features.  These features include the ability to run Linux GUI apps, view classified processes in the Task Manager, use Eco mode for your processes, and more.  Read more of this MakeUseOf article at [Windows 10 Insider Preview Build 21364 Lets You Run Linux GUI Applications (makeuseof.com)](Windows 10 Insider Preview Build 21364 Lets You Run Linux GUI Applications (makeuseof.com))

**LIBREOFFICE 7.1 COMMUNITY RELEASED WITH IMPROVED COMPATIBILITY, INTEROPERABILITY AND NEW FEATURES –** LibreOffice 7.1 Community is finally here.  This release comes with some major additions and improvements.  In the official announcement, they emphasize on it as a community release considering that it is not tailored for enterprises and their support needs.  This new release brings additions to LibreOffice Writer, improved performance in Calc, physics-based animation in Impress, improvements in the user interface, and more exciting things.  To see some of the key additions and improvements in this version of LibreOffice go to [LibreOffice 7.1 Community Released With Improved Compatibility, Interoperability and New Features – It's FOSS News (itsfoss.com)](LibreOffice 7.1 Community Released With Improved Compatibility, Interoperability and New Features – It's FOSS News (itsfoss.com))

hated Version 8 to Windows 10, everyone knew it was due to Apple OS X envy.)  So apparently, the first answer was "Let's release a glorified theme pack for Windows 10, and call it Windows 11!"

And it looks like the folks in Redmond did pretty much that, plus they rolled in some of the security updates and under-the-hood tweaks they'd been working on.  Windows 11, slated for release this Fall, is also billed as ideal for users in a hybrid work or remote learning environment, having better integration with Microsoft Teams, and a speech-to-text input option in almost any app.

The new interface has rounded corners, new icons, cool wallpapers, and a Start Menu stubbornly centered in the task bar, all designed to make Windows 11 feel "effortless, calm, personal, and familiar."  Those with laptops and tablets should notice that Windows 11 is faster, more battery-efficient, and better for multi-tasking than Windows 10.

There's a new Microsoft app store (probably sporting rounded corners and new icons).  Internet Explorer and Cortana (Microsoft's failed attempt at imitating Siri and Google Assistant) are both banished from Windows 11.

**But here's the catch.  Even though Windows 11 claims to "unlock the full potential of your system's hardware," it won't work on many PCs happily running Windows 10.**
Windows 11 requires 4 GB of RAM memory and 64 GB of disk storage.  Almost any PC less than 10 years old will have those specs.  But only "newer" CPUs running on 64-bit computers will be supported.  (Windows 10 runs on older 32-bit machines.)  As of today, you'll need an Intel 8th Generation, AMD Zen 2, or a Qualcomm 7 or 8 series CPU to run Windows 11.  Microsoft says this is needed to support the enhanced security features, but they are checking to see if 7th Gen Intel and AMD Zen 1 chips will cut the mustard.  Anything older will probably NOT make the grade.  See the [Windows 11 processor requirements](Windows 11 processor requirements) page for the latest news on this.
But there's another hurdle, a required hardware security feature called Trusted Platform Module, or TPM.  Microsoft says you need a TPM version 2.0 chip to run Windows 11.  Millions of PCs have a TPM 1.2 chip, but those can't be upgraded.  And to add to the confusion, you might have a TPM 2.0 chip that's disabled (turned off) in the BIOS settings.

So the [Windows 11 compatibility checker](Windows 11 compatibility checker) might tell you your PC can't be upgraded to Windows 11, even if you meet the requirements for memory, disk, CPU and TPM.  Ed Bott's article on ZDNet, ["Will Your PC Run Windows 11? Even Microsoft can't say for sure"](Will Your PC Run Windows 11? Even Microsoft can't say for sure) is a good read if you want to dig into this further.

My main desktop, a 5-year-old Dell OptiPlex has a 64-bit quad-core processor, and has 12GB of RAM.  It runs Windows 10 like a champ, but the advanced compatibility checker that I tried (see the link to WhyNotWin11 in the ZDNet article above) says it fails four tests for Windows 11 compatibility.  My Intel i5-6500 CPU is too old, the TPM chip is missing or disabled, it does not have "Secure Boot" enabled, and does not use the GPT method of disk partitioning.

I'm not going to spend money to upgrade my CPU, there's no way I want to mess with the disk partitioning, and who knows what might happen if I tweaked the BIOS settings to enable TPM and Secure Boot?  I'll have to live without the rounded corners and spiffy new icons in

## Scam Alerts

Last year, the Centers for Disease Control and Prevention (CDC) issued a temporary order to stop evictions due to the COVID-19 pandemic. Since then, this federal eviction moratorium has been extended several times, and on August 3, the CDC extended it again for counties where COVID cases are rapidly spreading. But renters in counties where the order does not apply now face the possibility of eviction if they still owe back rent. And on top of that, scammers can take advantage of the panic caused by this situation. Scammers reach out to renters facing eviction, promising rental assistance and pretending to be with the government. When they contact renters, they ask for bank account and other personal information, saying that they need this information so they can transfer emergency rental assistance money directly into these accounts.

**These are actual text messages sent to my cell phone.**

916-707-0754
Dear Loyal AT&T Customer, please take a couple minutes and your $100 at the end of this survey. Woxm9.info/o9MLv6….

718-974-0998
POSTAL NOTICE: Your order is scheduled for delivery tomorrow. Check estimated time of arrival here: ljprn9r.xscs5.xy….

480-543-0490
Hello George, I'm Kyle from Walmart. You have an item addressed to you. Can you please confirm it by today? Hifn5.info/6dLttb….

Windows 11. So it's a good thing that support for Windows 10 extends at least through May of 2023. By then, I'll probably have a new computer, or we'll all be assimilated into the Borg.
From the website
https://askbobrankin.com/whats_new_in_windows_11.html.

## Hyperlinks Are Cool

By Jim Cerny, Help Desk Host
The Saratoga Users Group

One of the really fun and easy things technology has brought us is hyperlinks. You probably use them all the time and don't even realize how cool they really are. Click on a hyperlink and PRESTO you are instantly somewhere else – tele-transported like Star Trek to another planet.



You may know hyperlinks by other names such as "hotlinks", "hypertext", or simply as a "link". Most often a hyperlink text is in blue and underlined, but not always. Let's see how they work when we are using our web browser (Firefox, Microsoft Edge, Safari, or whatever Internet browser you use) to explore the Internet. On almost every web page you will see some words underlined and in blue – if you click on them with your mouse (or touch them on a touchscreen) you will go to another web page. (The web page address will change in the address bar at the top of your web browser window). This is real magic. The people who have created that first web page put in a hyperlink that will take you someplace else. On your web browser, if you click on the backward arrow at the top you will return to the previous web page where you started. As you explore the web you are creating a "chain" of web pages you have viewed in this session one web-page link after another. You can go backward or forwards along this chain by clicking the left or right arrows at the top.

Here are some helpful things about hyperlinks:
A hyperlink can be text, an icon, or a photo. It can be indicated as a link by a different color (such as blue), underline, highlight, or by nothing at all. If you "hover" your mouse over a hyperlink without clicking on it, it may change color or be highlighted, and your mouse pointer may change to a hand.

Hyperlinks are used to instantly take you to another web page but they also have many other uses. They can, for example, take you to a different place on the same web page, document, or spreadsheet. Or they may just open a small box or window on your screen, such as when using menus. It is up to the person who created the web page to put in any hyperlinks and to determine what happens when you click on them. Almost anything is possible.
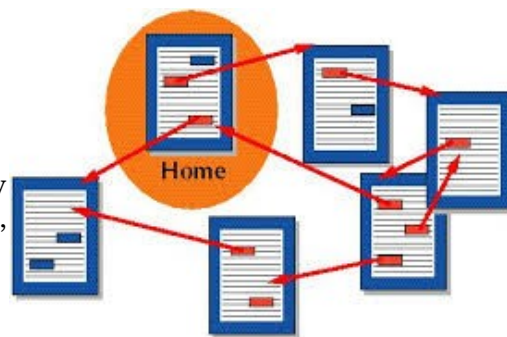
## Incredibly Useful Websites You Wish You Knew Earlier

**10MinuteMail.com** is a great site when you don't want to Use Your Real Email Address. It gives you a Temporary Email Address that will Expire in 10 Minutes. This is especially useful on sites that **require Email Address Validation or any other purpose.**
https://10minutemail.com/10MinuteMail/index.html

**PDFescape.com** lets you quickly edit a PDF or a PDF form online without using Adobe PDF App.
https://www.pdfescape.com/

**Master Touch Typing** with Typing.com Free Practice sessions.
https://www.typing.com/

**Animagraffs.com** will show you 360 degree 3D Animated InfoGraphics about everything. Like, how electric cars work, how a hand gun works, how a jet engine works, inside space stations, inside fire engine & much more.
https://animagraffs.com/

*Have I Been Pwned*, allows you to search across multiple data breaches to see if your email address has been compromised?
https://haveibeenpwned.com/

If you ever wanted to **Learn a New Language**, DuoLingo.com can help with a series of Activites and Games. They offer more than 30 Languages for Free. You can choose the Daily Goal of 10- 20 Minutes Per Day.
https://www.duolingo.com/

Sometimes clicking on a hyperlink will create a new "tab" on your web browser and keep your previous web page on a previous "tab." Each "tab" may have its own chain of web pages you have visited.

Yes, you can create your own "hyperlinks" in your documents or spreadsheets. Ask Google how to do this and watch some good videos on how to do it. It is not difficult. It is, basically, assigning a web page address to a word or photo in your document.

If a web page (or any file such as a document or spreadsheet) contains hyperlinks and you COPY it, the hyperlinks will go with it. Sometimes you may get a text box asking if you want the active hyperlinks to be there or to copy "just the text" without any links associated with them.

But most of the time we don't care how hyperlinks work or who put them in there – we just explore all we want by just clicking on whatever strikes our fancy. Think of a hyperlink as a free ticket to someplace else! Enjoy your surfin' safari, dude!

From the September 2020 STUG Monitor, www.thestug.org, jimcerny123@gmail.com.

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APCUG, **Tech for Seniors**, hosted by Ron Brown and Hewie Poplock, via Zoom, is a weekly event on Monday mornings. The session begins at 11:30 a.m. EST for a half hour of "social time", and at noon, the one hour meeting begins and is locked so no one can interrupt the speakers.

The meeting ID is **526-610-331** (there is no password) and you'll be placed in a waiting room and then admitted.

Here is a link to previous episodes: (132) Ronald Brown – YouTube.

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## Use keyboard commands to create screenshots in Win10

By John Stampfel, President
Brookdale Computer Users Group

I learn something new every day. To someone's question "In Windows 7 (or 8 or 10), is there a simple way to press "print screen," and then press just one more key (on the keyboard) to have the image automatically stored in a .jpg, file with an auto-generated filename?"

I learned from the answer posted on Quora.com by Pauli Vaara: "Windows 10 has it built-in. Hold down the Windows key while pressing PrintScreen, and the screenshot will be stored in your user account's Pictures > Screenshots folder in .png format, which keeps the original quality, unlike .jpg, which 'mushes' everything more or less."

The modifiers (holding down ALT, or Shift, or Control) while doing this don't seem to have the same effect as without the Windows key. They used to let you select a section of the screen or the active window. Holding down Windows-ALTPrtScrn will capture the active window only and save it in your user account's Video/Captures folder as a .png.

I used to use Windows-Shift-S to bring up the, also built-in, Windows 10 snipping tool. That allows selecting the area to be snipped. That saves the snip to the clipboard. With notifications turned on, it allows you to click and edit and share, but it brings up the Photos app. Maybe that is sometimes useful. One can annotate, modify, save, or "share"

## Around the World

### Low-Cost Nanobodies from Alpacas are Highly Potent Inhibitors of SARS-CoV-2

August 5th, 2021  Conn Hastings Medicine, Nanomedicine, Public Health

Researchers at the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany, engineered mini-antibodies, called nanobodies, against SARS-CoV-2.  The team's nanobodies are stable up to 95 degrees Celsius (203 F) and are cheaper and less complex to produce than conventional antibodies.

**P**roducing antibodies is costly and complex, and it is not currently possible to create enough supplies to treat everyone who needs them.

In contrast, nanobodies, which are more easily manufactured, could be a viable alternative.  This latest creation is shaping up to be a promising drug candidate for COVID-19.  "For the first time, they combine extreme stability and outstanding efficacy against the virus and its Alpha, Beta, Gamma, and Delta mutants," said Dirk Görlich, a researcher involved in the study, in a press release.

The Max Planck team use Alpacas to produce the nanobodies by immunizing them against the viral spike protein and then isolating the nanobodies from the blood before further purification and testing.

From the website https://www.medgadget.com/2021/08/low-cost-nanobodies-are-highly-potent-inhibitors-of-sars-cov-2.html.

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(send to email.)  Sharing here in Photos also includes, in Windows 10, the ability to share directly to "nearby" computers which also have the feature "share with nearby computers" turned on.  The other computer must accept the share (like AirDrop on iPhones.)

Need a screenshot of something while in Word, Excel, or PowerPoint on Windows 10?  That is now built into those programs.  Check the Insert menu.  So, more than one way to skin a cat.

From the August 2020 issue, BUG Bytes, www.bcug.com, jstampfel+bcug@gmail.com.

### * * * * * BITS and PIECES in the NEWS * * * * *

> **Editor's Note**: To continue reading the following articles, you may copy the long URL at the end of the article and enter it into a web browser **or** click on the URL in the web version of this newsletter.

## TikTok captures your face

By *Dr Niels Wouters and Professor Jeannie Paterson*
*University of Melbourne*

TikTok is hugely popular.  But its latest decision to capture unique digital copies of your face and voice is a cybersecurity threat to your identity and privacy.

With more than one billion users since 2017, TikTok is one of the fastest-growing social networks.  Its audience base is rapidly expanding beyond Gen Z's early adopters, now including boomers and retirees.  Despite its growth, TikTok has been unable to stop a stream of rumours and leaks.  Its iOS app has been caught copying clipboard contents, and there's a history of silencing critical voices and disabled users.

### Logging our Lives and Identities

TikTok has attracted further controversy by collecting considerable data about its users.  Not too dissimilar from other social networks, powerful algorithms scan videos uploaded to TikTok to detect objects and scenery.  And personal identifiers entered when joining TikTok, often linked to our other social media accounts, are connected with information inferred about our behaviour to create comprehensive digital profiles of users.  These are the basis for serving users with micro-targeted advertising.  Other practices stretch far beyond those of other data-hungry social media providers.  Speech, for instance, is automatically transcribed to generate automatic captions for video.

But TikTok's recently updated privacy policy needs our attention.  It now enables TikTok to collect biometric data in the form of "faceprints and voiceprints" from its users in the US.  These biometrics are unique and personal digital replicas of appearance, behaviour and expression.  They are comparable to fingerprints as they can help others identify, surveil and profile people of interest.

www.rcsi.org          The Rochester Computer Society, Inc.          9

Biometrics have become a new battleground between social media platforms and privacy regulators.  Facebook has been caught out in the past for capturing facial recognition data without user consent.  Only a few months ago, a settlement was reached.  TikTok recently agreed to pay $US92 million to settle a lawsuit accusing it of wrongfully using facial recognition to distinguish age, gender and ethnicity in user videos for ad targeting.  The case didn't go to court, and TikTok rejected the allegations.  However, the new policy change suggests TikTok is making these practices explicit to avoid future legal action.

Continue this article at https://pursuit.unimelb.edu.au/articles/tiktok-captures-your-face.

## Rice team creating insulin-producing implant for Type 1 diabetes

Rice University

JDRF funds creation of implant to automatically regulate blood glucose levels.

HOUSTON – (July 27, 2021) – Rice University bioengineers are using 3D printing and smart biomaterials to create an insulin-producing implant for Type 1 diabetics.

The three-year project is a partnership between the laboratories of Omid Veiseh and Jordan Miller that's supported by a grant from JDRF, the leading global funder of diabetes research.  Veiseh and Miller will use insulin-producing beta cells made from human stem cells to create an implant that senses and regulates blood glucose levels by responding with



the correct amount of insulin at a given time.
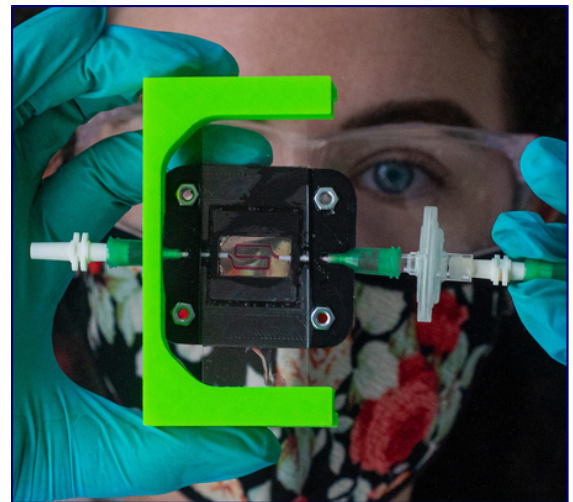
Veiseh, an assistant professor of bioengineering, has spent more than a decade developing biomaterials that protect implanted cell therapies from the immune system.  Miller, an associate professor of bioengineering, has spent more than 15 years researching techniques to 3D print tissues with vasculature, or networks of blood vessels.

"If we really want to recapitulate what the pancreas normally does, we need vasculature," Veiseh said.  "And that's the purpose of this grant with JDRF.  The pancreas naturally has all these blood vessels, and cells are organized in particular ways in the pancreas.  Jordan and I want to print in the same orientation that exists in nature."

## Odds and Ends

**Ultrasound Patch Monitors Blood Flow**
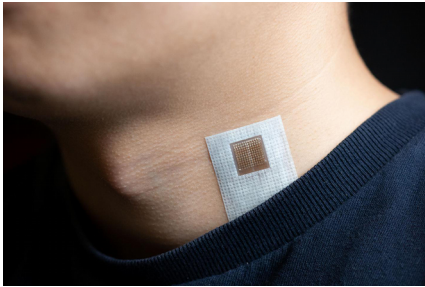


Researchers at the University of California San Diego created an ultrasound patch that can measure blood flow in vessels as deep as 14 cm (about 5 ½ inches) within the body.  The stretchy patch can be applied to the skin and may help clinicians to monitor and diagnose various conditions, including blockages that could cause an infarct.  The patch contains an array of ultrasound transducers that can measure blood flow in vessels directly beneath it and the ultrasound beam can also be steered to assess vessels that are nearby, but not directly below.

This patch is conceived as a more convenient alternative.  "Just stick it on the skin, then read the signals.  It's not operator dependent, and it poses no extra work or burden to the technicians, clinicians or patients," said Sai Zhou, a researcher involved in the study, via a UCSD press release.  "In the future, patients could wear something like this to do point of care or continuous at-home monitoring."

This article was found at https://www.medgadget.com/2021/07/ultrasound-patch-monitors-blood-flow.html.

Type 1 diabetes is an autoimmune disease that causes the pancreas to stop producing insulin, the hormone that controls blood-sugar levels.  About 1.6 million Americans live with Type 1 diabetes, and more than 100 cases are diagnosed each day.  Type 1 diabetes can be managed with insulin injections.  But balancing insulin intake with eating, exercise and other activities is difficult.  Studies estimate that fewer than one-third of Type 1 diabetics in the U.S. consistently achieve target blood glucose levels.

Read the rest at https://www.eurekalert.org/news-releases/923795.

## Chinese giant CATL launches a commercial salt-based battery for EVs

By Nick Lavars, July 29, 2021

A cheap and abundant material like salt might have plenty to offer the world of science, and one field where it could have game-changing effects is battery chemistry.  Leveraging salt could help us avoid much of the cost and difficulty in sourcing scarcer lithium, and Chinese giant CATL is looking to lead the charge by launching its first commercial sodium-ion battery.

Like lithium batteries that power smartphones, laptops and much of the modern world, sodium batteries also shuttle ions between two electrodes as the device is charged and discharged. But sodium ions present a few problems that lithium ions don't.  The ions are larger in size and are prone to creating impurities that can cut the battery life short.  In addition, they don't offer anywhere near the energy density of tried and trusted lithium.

CATL says its researchers have overcome these issues with sodium-ion batteries by using a hard and porous carbon material for the anode and tweaking the structure of another material called Prussian White to rearrange the electrons.  These form key components of the company's first commercial sodium-ion battery, which boasts some impressive performance figures.

It is claimed to have an energy density of up to 160 Wh/kg, which is a far cry from the density offered by lithium batteries of up to 285 Wh/kg, but is nothing to sneeze at in the world of sodium batteries.  It can also be charged to 80 percent capacity in 15 minutes at room temperature, and maintain 90 percent of its capacity in temperatures of -20 °C (-4 °F).

Continue on the website https://newatlas.com/energy/chinese-giant-catl-commercial-salt-based-battery/.

## Potential COVID-19 medication found among tapeworm drugs

by The Scripps Research Institute, August 6, 2021

A group of medications long prescribed to treat tapeworm has inspired a compound that shows two-pronged effectiveness against COVID-19 in laboratory studies, according to a new publication appearing online in the journal *ACS Infectious Disease*.

The compound, part of a class of molecules called salicylanilides, was designed in the laboratory of Professor Kim Janda, Ph.D., the Ely R. Callaway, Jr. Professor of Chemistry and director of the Worm Institute for Research and Medicine at Scripps Research, in La Jolla, CA.

"It has been known for 10 or 15 years that salicylanilides work against certain viruses," Janda says. "However, they tend to be gut-restricted and can have toxicity issues."

Janda's compound overcomes both issues, in mouse and cell-based tests, acting as both an antiviral and an anti-inflammatory drug-like compound, with properties that auger well for its use in pill form.

Salicylanilides were first discovered in Germany in the 1950s and used to address worm infections in cattle. Versions including the drug niclosamide are used in animals and humans today to treat tapeworm. They have also been studied for anti-cancer and antimicrobial properties.

The modified salicylanilide compound that Janda created was one of about 60 that he built years ago for another project. When the SARS-CoV-2 virus became a global pandemic in early 2020, knowing that they may have antiviral properties, he started screening his old collection, first in cells with collaborators from Sorrento Therapeutics and The University of Texas Medical Branch, and later, after seeing promising results, working with Scripps Research immunologist John Teijaro, Ph.D., who conducted rodent studies.

One compound stood out. Dubbed simply "No. 11," it differs from the commercial tapeworm medicines in key ways, including its ability to pass beyond the gut and be absorbed into the bloodstream—and without the worrisome toxicity.

Continue reading at https://medicalxpress.com/news/2021-08-potential-covid-medication-tapeworm-drugs.html.

* * * * * CLUB and REGIONAL NEWS * * * * *

## RCSI

The **planning meetings are held online** the first Tuesday of each month, at 7:00 pm and are open to any member.  We use Jitsi, and a link will be emailed to members before our next planning meeting.  ANY CLUB MEMBER MAY ATTEND and voice their opinions about club operations.

**Yes, we are planning a picnic this September** (not our usual August).  It will be at Camp Eastman in Irondequoit, with the entrance along Lakeshore Blvd.  Our picnic will be held in the 'Rotary Cabin'.  Because of Covid, we did not have a picnic last year, so let's see if we can restart the tradition.  We will have more details next month.

**SUNNKING** FREE residential e-recycling event:
Xerox Corp, Orchard Street and Panama Road, Webster, NY 14580
Saturday, August 28, 2021, 8:30 am – 12:00 pm.  Limit of 4 CRT TVs or monitors.

**\* \* Ticket is REQUIRED for entry \* \***,
www.sunnking.com/events/webster-08-28-21
Registration closes at 4 p.m. the day prior OR when event is fully booked.  In-Kind Sponsors: Senator Pamela Helming and Assemblyman Brian Manktelow

## APCUG Free, Virtual Technology Conference, ONLINE

presented by APCUG, **Saturday, August 21**, from 1 – 4 pm, EST.

For Conference Description & Registration Links, go to
**www.apcug2.org/category/virtual-tech-conference**

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Our Usual Meeting Place
**St John's Meadows** at Johnsarbor Drive, is on the left, past Clinton Avenue, when going West on Elmwood Avenue.  The opening in the white fence is Johnsarbor Drive.  At the 'T', turn right.  The meeting is in the first building on the left – **Briarwood**.
Our meeting place can change. Please check our website before each meeting.  **www.rcsi.org**

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