

لإعلاناتكم واقتراحاتكم

يرجى الاتصال بنا على

313-502-8801

وزيارة موقعنا على الشبكة

freeopinionpress.com

VOL 06 | السنة السادسة 2022

2022 العدد 44

August 2022 | ISSUE NO. 44



Lt. Governor Gilchrist Announces Expanded Collaboration with Electric Vehicle Charging Company Volta

Lieutenant Governor Garlin Gilchrist II announced that Volta Charging, an electric vehicle infrastructure company, will expand its presence in Michigan to help build out the state's broader electric vehicle infrastructure, ultimately improving transit options for residents and strengthening the state's EV ecosystems.

"We are pleased to deepen our collaboration with Volta, as our partnership plays a critical role in ensuring EVs and their charging infrastructure are more accessible and equitable for all," said Lt. Governor Gilchrist II. "Through this project, and Michigan's broader efforts to implement a comprehensive EV ecosystems approach, we will lead the nation in developing the future of sustainable transportation."

Volta will add at least eight additional chargers at the following Kroger locations to its network, thanks in part to a broader, nationwide collaboration between the company and Kroger to accelerate the delivery of affordable, equitable access to charging:

- Southgate Kroger: 16705 Fort St, Southgate, Mich.
- Roseville Kroger: 20891 E Thirteen Mile Rd, Roseville, Mich.
- Westland Kroger: 200 Merriman Rd, Westland, Mich.
- Lapeer Kroger: 540 S Main St, Lapeer, Mich.

"These new EV charging deployments are yet another proof point of the success that comes from public and private entities working together under a common goal - in this case, ensuring

that Michigan's communities have access to infrastructure that supports reliable, environmentally conscious transit solutions," said Charlie Tyson, Technology Activation Manager at MEDC. "We are excited to see the positive impacts these new chargers will bring to our state's communities and look forward to further innovative collaborations with Volta and its partners."

Volta currently has more than 2,800 charging stations in its network across the United States, which are compatible with all electric vehicles in the country as well as some plug-in hybrid models. The company also offers a mobile app, which allows users to search for charging stations nearby, check station availability, report issues, provide suggestions for improvement and more.

"Volta's innovative business is built to help Michiganders get the most out of the historic public investment in climate action and electric mobility," said Kevin Samy, Head of Policy Communications at Volta Charging. "Our electric future belongs to all of us, and Volta is thrilled to expand our special partnership with the state of Michigan and DTE to install more affordable and readily available charging in underserved communities."

"Ensuring that everyone has access to clean energy and the infrastructure associated with it is a priority of ours," said Tony Tomczak, vice president of electric sales and marketing, DTE. "This partnership is one of the many ways we are working with our state agencies to drive transportation electrification for all."

كيف أصبح الكرسنال ميث القاتل الاول للشباب العراقي؟



الحفل السنوي 24 للجمعية اليمنية الأمريكية للمنهج الدراسية للطلبة المتفوقين



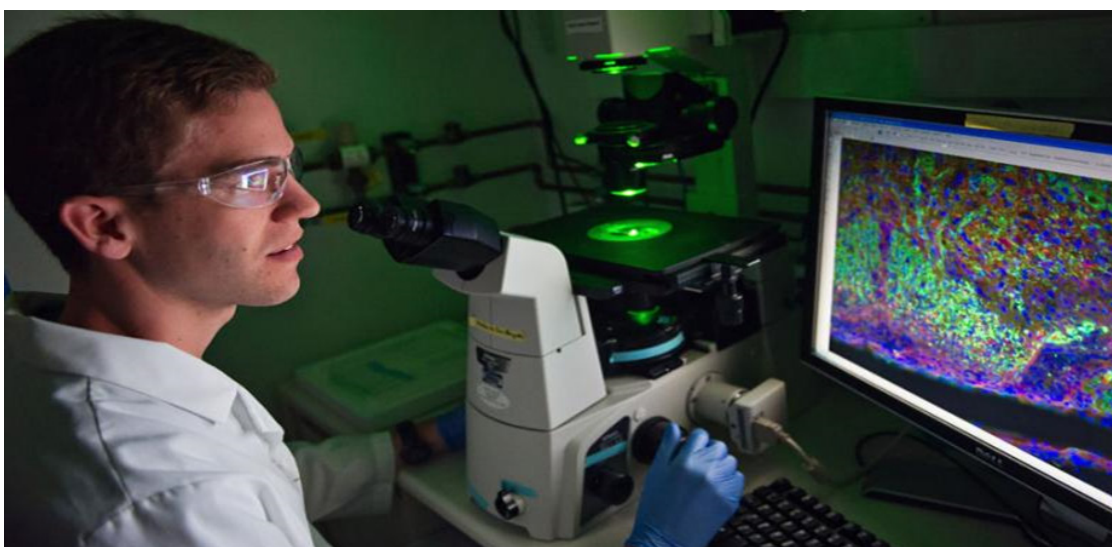
Reflecting on Medicaid's 57th birthday



الطبيب والطب في الحضارة السومرية



David Giles: Seeing the light



كيف أصبح الكرستال ميث القاتل الاول للشباب العراقي؟

د: افراح الدليمي



وتقنية كبيرة لم تحصل عليها الهيئة لحد الان . ويعد الإهمال الحكومي للحكومات المتعاقبة سببا إضافيا لانتشار المخدرات بهذه الصورة، وعدم إيجاد الحلول العملية لمكافحتها منذ بداياتها.

رابعاً: يبدو ان صانع القرار العراقي لا يشعر بمخاطر هذه الظاهرة، حيث انه عام ٢٠١٧ تمسن قانون مكافحة المخدرات رقم ٥٠ لسنة ٢٠١٧ و تم تأسيس هيئة عليا لمكافحة المخدرات في السنة ذاتها والتي لاتزال تعاني من الكثير من النواقص المتمثلة بقلة او انعدام البنى التحتية الخاصة، اذ لازالت تعاني من عدم توفر اماكن خاصة للموقوفين بتهمة التعاطي وعدم توفر مستشفيات وعيادات نفسية خاصة لمعالجة المدمنين على المخدرات وعدم توفر التخصصات المادية والاجهزة التقنية الحديثة الخاصة بالتحقيق وملاحقة تجار المخدرات خاصة بعد ان بدأ تجار المخدرات باستخدام تقنية الطائرات المسييرة والشراعية لتهرب المخدرات عبر الأجواء العراقية .

خامساً: ولعل أقوى سبب لانتشار تجارة المخدرات هو ضعف الحكومات المتعاقبة المتمثل بعدم تمكنها من القبض على الرؤوس الكبيرة اي التجار الكبار والذي ترجع بعض أسبابه الى حماية بعض الميليشيات وبعض شيوخ العشائر مما دفع هذه الحكومات الى الاكتفاء بالقبض على الموزعين الصغار ،والذي تتراوح اعمارهم بين ١٥-٣٥ عاماً وعدته انجازاً آمناً . وايضا عدم قدرة الحكومة على حماية الضباط والقضاة المعنيين بقضايا الاتجار بالمخدرات من عمليات الاغتيال المتكررة بحق العديد منهم .

العقيد بلال صبحي انه « تم القبض على (٨٢٠٠) متهم بتجارة وترويج وتعاطي المخدرات خلال الأشهر الستة الماضية من سنة ٢٠٢٢ » ويتابع قائلاً أن «مناطق الرصافة في بغداد، تصدرت المناطق الأكثر تجارة وتعاطي للمواد المخدرة»، منوهاً إلى أن «عصابات المخدرات تستهدف محافظات العراق كافة، فيما تعد محافظة المثنى من الأكثر انتشاراً للمخدرات» مبيناً أنه «خلال الأشهر الستة الماضية تم ضبط أكثر من (٢١٠) كيلو غرام من المخدرات بينها أكثر من (١٨٠) كيلوغراماً من مادة الكريستال».

ومن المؤكد ان هناك الكثير من الأسباب التي ساهمت وساعدت في ارتفاع الارقام الى هذه الدرجة في العراق ومن أبرزها:

أولاً: انهيار المنظومة الامنية نتيجة لقرارات الحاكم المدني (بول بريمر) المتمثلة بوزارتي الداخلية والدفاع والتي فسحت المجال لضعاف النفوس لادخال هذا السم القاتل من اجل الاثراء المادي

ثانياً: العوز المادي والبطالة والتي افرزت نوعين من التأثير على فئة الشباب، فمنهم من تحول الى متعاطي هروبا من الواقع المرزوي الذي يعيشه الشاب العراقي من غياب أبسط متطلبات الحياة من عمل وراتب وتأسيس حياة مستقلة والبعض للسبب نفسه تحول الى مروج وناقل وبيع لهذه السموم من اجل الربح المادي .

ثالثاً: ما ذكره اللواء مازن القرشي المسؤول في الهيئة العليا لمكافحة المخدرات حول صعوبة ضبط الحدود لبعض المنافذ الحدودية ذات التضاريس الحادة والتي تحتاج امكانيات مادية

يبدو واضحا أن من أبرز التغييرات الحاصلة بعد عام ٢٠٠٣ هو تحول العراق من ممر لتجارة المخدرات الى مركز للتعاطي والتوزيع الداخلي والتصدير لدول الخليج العربي، ما يعني بوضوح تراجع سلطة الدولة العراقية والاجهزة الامنية عن السيطرة على هذا الملف الذي يعتبر تهديد خطير على المجتمع العراقي والأجيال القادمة بجانب الأزمات الأخرى التي تواجه العراقيين في الفترة الحالية.

ومن أجل معرفة الاحداث على ارض الواقع نسلط الضوء على تصريحات إعلامية للواء مازن القرشي حول أخطر أنواع المخدرات الداخلة للعراق ومنافذ الدخول والتوزيع والذي قال فيها:

«يعتبر الكرستال من اخطر انواع المخدرات وذلك لرخص اسعاره وسهولة الحصول عليه وبعدها حبوب الكبتاكون والحشيشة اما عن اهم المنافذ الحدودية لدخوله فهي تبدأ من افغانستان المعروفة ومنها الى ايران التي تتميز بزراعة وصناعة المخدرات وتدخل للعراق عبر منافذ محددة اغلبها يتركز في المحافظات الحدودية مثل ميسان والبصرة ومنها توزع عن طريق بابل الى محافظات الوسط والجنوب اما بخصوص حبوب الكبتاكون فانها اغلبها يدخل عن طريق الانبار قادم من سوريا وبالاخير كل انواع المخدرات الداخلة للعراق تذهب الى البصرة ليتم من هناك تصديرها الى دول الخليج .

اما الحشيشة فانها تتركز في ميسان وتأتي من ايران عن طريق الاهوار »

كما يقول مسؤول الاعلام في المديرية العامة لمكافحة المخدرات التابعة لوزارة الداخلية

وبعد تشخيص الأسباب لابد من تحديد الخطوات اللازمة لمواجهة هذه الافه الفتاكة بالشباب والتي تتلخص بدعم هيئة مكافحة المخدرات بكل انواع الدعم المادي واللوجستي وضبط الحدود والقضاء او حتى التقليل من البطالة عن طريق خلق فرص عمل للشباب من خلال تشجيع الاستثمار والقطاع الخاص، إضافة إلى التركيز على التوعية الاعلامية عن طريق القنوات ووسائل التواصل الاجتماعي وتعريف المجتمع وخاصة شريحة الشباب بمخاطر هذه المواد المخدرة الذي تؤدي به الى الضياع .

ويبقى السؤال قائماً : هل ستقوم الحكومة والاجهزة المعنية عمليا بمكافحة خطر المخدرات ام ستبقى العمليات مجرد عمليات استعراضية للاستهلاك الاعلامي المحلي ؟؟



لجميع انواع العقارات بيع وشراء وأيجار البيوت

Abdulilah Aljabur
25636 Ford Road
Dearborn Heights, Michigan 48127
Cell: -313.995.6448
Office: 313.472.0027
Fax: 313.472.8626
Aaljabur@yahoo.com
www.century21cc.com



CARE Plus

PHYSICAL THERAPY

313-908-2069

WE SPECIALIZED IN AUTO ACCIDENTS AND WORK INJURIES
WE ACCEPT MOST HEALTH INSURANCE
OPERATION HOURS
MONDAY- FRIDAY
9AM-5PM

لم يعد الشفاء من الاصابات آمنة...
مع كير بلس أصبح واقعاً للعلاج الطبيعي
مجهز باحدث الاجهزة وتحت إشراف أخصائيين
لمعالجة حوادث السيارات وإصابات العمل

24355 Joy RD,
Dearborn Heights,
Michigan, 48127



313.908.2069

الحفل السنوي 24 للجمعية اليمنية الامريكية للمنح الدراسية للطلبة المتفوقين



الرأي الحر

اقامت الجمعية اليمنية الامريكية حفلها السنوي الرابع والعشرين للمنح الدراسية للطلبة المتفوقين وابتدأ الحفل بعزف النشيد الوطني الامريكي واليمنى ثم تلاوة آيات من الذكر الحكيم ثم تلتها كلمة لعريف الحفل الدكتور خالد شاجرة والذي أكد فيها على أهمية التعليم وتأثيره البناء في المجتمع. ثم جاءت كلمة كل من عمدة مدينة ديربورن عبد الله حمود وعمدة مدينة هامترامك امير غالب والذي كان من المستفيدين من هذه المنحة عندما كان في مرحلة الدراسة الاعدادية.

والسيد سام بيضون والشيخ بلال الزهيري والدكتور محمد الحجابي رئيس منظمة الأيدي النقية. وكان من بين الحضور السيد كين هيرتس مدير مكتب السناتور جيرى بيتر والذي قدم بدوره شهادات تقديرية للطلبة المتفوقين. بعدها تم تقديم المنح الدراسية للطلبة المتفوقين والتي تعد من المبادرات الناجحة للجمعية اليمنية الامريكية والتي تعتبر داعماً للعملية التعليمية لابتداء الجالية. وبدورنا كأسرة جريدة الرأي الحر نتقدم بالشكر للجمعية اليمنية الامريكية وجميع المشاركين والداعمين لهذا الحفل ونتمنى لهم دوام التوفيق والنجاح.



السفر إلى الفضاء يُسرّع شيخوخة العظام ويهدد بحالات لا يمكن ترميمها

آلة للجري، ودراسة تمارين رياضية، وبرنامج تدريب على رفع الأثقال، لكن تكييف برامج التدريب أثناء رحلات الفضاء لتلبية الاحتياجات الفردية لرواد الفضاء بشكل أفضل أمر بالغ الأهمية، وفقاً للدراسة. وأضافت ليهاردت: «إن تطوير معدات رياضية جديدة تعمل في ظروف انعدام الجاذبية ولا تشغل مساحة كبيرة يمثل تحدياً كبيراً». وقد تساعد أيضاً أدوية مثل البايكسوفونيت، التي تمنع تدهور العظام وتستخدم كعلاج لهشاشة العظام. وتابعت ليهاردت: «تستخدم ناسا بالفعال البايكسوفونيت، لكننا لا نعرف بعد ما يكفي عن كيفية عمله بالضبط في الجاذبية الصغرى، ونوصي بإجراء مزيد من البحوث المنهجية في الجمع بين العلاج الطبي والتمارين البدنية». المصدر: وكالات

يعد العظام بالدم والأعصاب والخلايا التي تساعد على النمو والشفاء. ووجدت الدراسة أن بعض رواد الفضاء أصيبوا بأضرار لا يمكن إصلاحها. وأشارت ليهاردت: «لقد تمكنا من إثبات أن التجديد يكون أكثر صعوبة كلما طالت مدة بقاء الرواد في الفضاء.. فالأشخاص الذين لديهم مستويات نشاط أعلى لديهم معدل تجديد أعلى للعظام، ويتمثل التحدي في الحفاظ على مستويات النشاط هذه أثناء المهمات في الفضاء». وقالت ليهاردت: «إذا بقي البشر في الفضاء لمدة ثلاث سنوات في كل مرة، فنحن بحاجة إلى مراقبة المخاطر الصحية التي ينطوي عليها ذلك أيضاً». وقد يكون الحل كامناً في تكييف التدريب وإضافة الأدوية لأولئك الذين يسافرون إلى الفضاء. وتحتوي محطة الفضاء الدولية على

كشفت دراسة جديدة أن قضاء فترات طويلة في الفضاء يمكن أن يلحق الضرر، بشكل لا يمكن إصلاحه، بالعظام، ويتسبب في جعل أجزاء من الهيكل العظمي البشري تتقدم في العمر بما يصل إلى ١٠ سنوات. ودرس فريق بحثي من ألمانيا والولايات المتحدة وكندا، ١٤ رجلاً وثلاث نساء قبل رحلاتهم الفضائية، وبعد ستة أشهر و١٢ شهراً من عودتهم. وقاس الفريق كثافة وقوة عظام الساق والذراع السفلي والقصبة والكعبرة (أحد عظمي منطقة الساعد)، وقاموا أيضاً بقياس البنية المجهرية التريبيقية داخل العظام. كما قاس الباحثون معدل تجديد العظام، حيث يتم فيها ارتشاف العظام القديمة واستبدالها بالعظام الجديدة، باستخدام المؤشرات الحيوية في دماء رواد الفضاء وبولهم.

وقال الباحثون إن النتائج كانت مقلقة، حيث أن تسعة من رواد الفضاء السبعة عشر لم يتعافوا تماماً بعد عام كامل من عودتهم من الفضاء، وكان لديهم انخفاض في قوة العظام وكثافة المعادن بنسبة تصل إلى ٢٪. وأوضحت مؤلفة الدراسة أنا ماريا ليهارت، عالمة الرياضة في مستشفى جامعة إرلانجن بألمانيا: «قد لا يبدو هذا كثيراً، لكنه يتوافق مع فقدان العظام المرتبط بالعمر لمدة عشر سنوات على الأقل».

وتابعت في بيان صحفي: «بالنسبة للمتضررين، هذا يعني أنه سيتعين عليهم توقع ظهور هشاشة العظام في وقت أبكر بكثير وقابلية الإصابة بالكسور».

وتختلف الطريقة التي تبدو بها العظام في الفضاء عن شيخوخة العظام على الأرض، ففي الفضاء تأثر الهيكل الداخلي لعظام رواد الفضاء أكثر من السطح، وهو الغلاف الخارجي الذي

الطبيب والطب في الحضارة السومرية

زينب الكفاني

الطبيب القديم لم يكن مجرد ممارس لمهنته وإنما كان إنساناً متعلماً ومثقفاً فلأجل أن يتعلم كتابه المقاطع المسمارية المعقدة بعلاماتها التي تبلغ المئات وقراءتها التي تبلغ الآلاف على نحو صحيح ورتيب كان عليه أن يقضي أكثر شبابه في المدرسة السومرية حيث كان يدرس ويستوعبها كان سائداً في زمنه من المعرفة العلمية والأدبية. وتتألف «الكتب المدرسية» بالدرجة الأولى من مجموعات من الكلمات والعبارات والقررات ومن مقتطفات ومؤلفات كاملة كانتتخضر من قبل «أوميا»، أو أساتذة المدرسة، وكان على الطالب أن يستنسخها ويعيد استنساخها حتى يحفظها عن ظهر قلب، وكانت التأليف المختصرة والموجزة والخالية من التنميقات ترفق دون شك بتوضيحات شفوية أو بحاضرات. ومن الجائز أن يكون دستور أدويتنا القديم تأليفاً من هذا الصنف الذي يهينه طبيب ممارس لمهنته كان في نفس الوقت «محاضراً» في الطب فإن بالإمكان وصف ما ذكر اعلاه وصفاً ملائماً بالقول بأنها صفحة من أقدم كتاب مدرسي معروف في تاريخ الطب.

كان الطبيب السومري كقرينه الطبيب الحديث يلجأ للمصادر النباتية والحيوانية والمعدنية لعمل وصفات طبية اما المواد المعدنية يقصد بها والفضلة هي كلوريد الصوديوم (ملح الطعام) وقار النهر والزيت الخام اما المصادر الحيوانية هي الصوف والحليب وترسلسلحفاً وحية النهر لكن اغلب الادوية كانت تستحضر من النباتات كالزعر والخرذل وشجرة البرقيق والكمثري والتين والصفصاف ونبات ال (من) والتتوب والسنوبر ومن منتجات مصنوعة كالجعوهالنبيد والزيت النباتي وكذلك تمت غرس فكره الالهة الى جانب الطبيب ترأست الالهة غولا الصحة والشفاء بالرغم من علا شأن الطب عندهم، ولكنه ظل يختلط بالدين والطقوس المتعلقة فالمرض لا يمكن شفاؤه إلا إذا طردت الشياطين اما اسبابه دائما تعزى الى خطنية ارتكبها المريض

توضح الكتب الطبية من مكتبة آشوربانيبال، أن الأطباء يمتلكون قدراً هائلاً من المعرفة الطبية ويطبقون ذلك بانتظام في رعاية مرضاهم مع استرضاء الآلهة وأرواح الموتى. فيحين أن هذه العادة قد تكون سادت في أجزاء من بلاد ما بين النهرين، وفي أوقات مختلفة إلا انه لم يعتمد عليها فقط وكذلك هناك ادعاءات بان سكان وادي الرافدين ليس لديهم طبيب وكان اعتمادهم قائم على التشخيص القائم على الخرافات والاهوام غير صحيح وخطأ فادح بل كان هناك نوعان أساسيان من الأطباء عبر تاريخ بلاد ما بين النهرين النوع الاولASU (طبيب عالج المرض أو الإصابة تجريبياً) والاسيبو (معالج اعتمد على ما يمكن تسميته بـ «السحر»)

كان هناك أيضاً جراحون وأطباء بيطريين (الذين يمكن أن يكونوا أيضاً أسو أو اسيبو). كان كلا النوعين من الأطباء يمارسان طب الأسنان، وربما يكون كلاهما قد أشرف أيضاً على عمليات الولادة مع القابلات ولم يهتموا فقط بالطب الجسدي بل توسعوا فقد كان الطب في بلاد الرافدين يقسم إلى قسمين جسدي وطب روحي (النفسى) وتستخدم الموسيقى لعلاج الروح المريضة وفق الاعتقاد القديم ومن المفيد ان نؤكد ان



مسلة من الحجر الجيري تعود للقرن الثالث عشر قبل الميلاد وتظهر فيها الالهة غولا والتي كانت تمثل الشفاء والطب المسلة محفوظة في متحف اللوفر في فرنسا



تعرف على واحدة من أجمل المكتبات التاريخية التي ألهمت مؤلفة «هاري بوتر» جيه كيه رولينغ



ليس أفضل من الكتاب ليحفظ التاريخ، وفي هذه المكتبة بمدينة بورتو الساحلية في البرتغال بإمكاننا إيجاد التاريخ والكتب معا. بل وأكثر من ذلك لأن مكتبة «ليلو» تعتبر واحدة من أجمل المكتبات في العالم، وأكثرها جذبا للزائرين. لذا توجه مراسل يورونيوز ريكاردو فيغويرا إلى هناك ليكتشف لماذا تستقطب الناس من كل مكان.

بمناسبة الذكرى ١١٣ على إنشائها، أعلنت المكتبة عن شراء إصدارات كتب نادرة بمئات آلاف اليوروهات. وكرمت الكاتب إدواردو لورينسو الذي يعتبر أعظم المفكرين البرتغاليين الأحياء. وهو بدوره يرى المكان بمثابة معبد. وقال عنها: «المعابد أهم مما يمكن أن ندركه في مثل هذه الأماكن الأسطورية. نحن محاطون بالأشباح، كالكتب المعروضة هنا. كل منها يخفي الكثير من الأسرار والخبائيا.»

المكتبة تسعى لشراء نسخ من أول جريدة نشرت في البرتغال، وقد تدفع ما يصل إلى ٧٠ ألف يورو ثمنا للطبعة الأولى من كتاب «هاري بوتر وحجر الفيلسوف». إنها طريقة مبتكرة من أجل تقديم الشكر للساحر الشاب على الشهرة التي منحها إلى ليلو.

في الواقع يُعتقد بأن سلسلة هاري بوتر ولدت هناك عندما كانت الكاتبة جيه كيه رولينغ تعمل في بورتو كمدرسة خلال التسعينيات. هذه المكتبة التي تعود إلى العام ١٩٠٦، تستقبل كل عام نحو مليون زائر، وتبيع ١٢٠٠ كتاب يوميا. لإدارة تدفق السياح تم وضع رسوم دخول بقيمة ٥ يورو، تقتطع من قيمة الكتب التي يتم شراؤها فيما بعد.

قال أحد الزوار: «علمت أن هذا المكان أهم جيه كيه رولينغ قصة هاري بوتر، لذا أردت التعرف على المكتبة». وقال آخر: «إنها في مصاف أجمل مكتبات العالم، إلى جانب أتنيو في الأرجنتين، وغيرها.»

أورورا بيدرو بينتو، المديرية التنفيذية للمكتبة قالت لنا: «كنا نخشى أن تتحول المصدر: وكالات

اليابانيون يبتكرون معالجا يعمل بسرعة قياسية في الكمبيوتر

المنطقية، ولذلك تكون غالبية أجهزة الكمبيوتر الكمومية أدنى فاعلية من نظيراتها المصنوعة من السيليكون بعدة مراتب. ويعيق هذا الأمر العمليات الحسابية المعقدة التي تنطوي على عدد كبير من الخطوات.

وقام فريق من علماء الفيزياء اليابانيين بقيادة، كينجي أوموري، الأستاذ في المعهد الوطني للعلوم الطبيعية في اليابان، بحل هذه المشكلة بالنسبة إلى أجهزة الكمبيوتر الكمومية القائمة على الذرات الباردة. وتلعب جسيمات خاصة يسميها العلماء بـ «ذرات ريدبيرج»، دور الببتات الكمومية داخل هذه الحواسيب.

وقام البروفيسور، أوموري وزملاؤه بتسريع عمل أجهزة الكمبيوتر الكمومية القائمة على ذرات ريدبيرج بعدة مراتب، وأصبح هذا الأمر ممكنا بسبب تطوير إستراتيجية جديدة لإخضاع ذرات الروبيديوم ٨٧ للإشعاعات باستخدام نبضات إشعاع ليزر فائقة القصر وقوية في الوقت نفسه.

يقول علماء الفيزياء حاليا إن العملية برمتها تستغرق حوالي ٦,٥ نانوثانية، أي أسرع بنحو ١٠٠ مرة من أجهزة الكمبيوتر الكمومية الأخرى القائمة على الذرات الباردة، ويأمل الباحثون أن يؤدي اختراعهم إلى تصميم أجهزة كمبيوتر جديدة قادرة على أداء مئات الملايين من العمليات في الثانية وحل مشكلات معقدة يمكن الاستفادة منها في الممارسة.

المصدر: وكالات

ابتكر علماء الفيزياء اليابانيون معالجا كموميا ثنائي الكيوبتات يعمل بسرعة قياسية ويقوم على الذرات الباردة وإنه قادر على أداء مئات الملايين من العمليات في الثانية.

وجاء في بيان نشره المكتب الصحفي في المعهد القومي للعلوم الطبيعية في اليابان أن علماء الفيزياء يعملون على تسريع الكيوبتات على مدى عقدين من الزمن للتقليل من احتمالية تسبب الضوضاء العشوائية في حدوث خلل وظيفي، وتسمح سرعة التنفيذ الفائقة للعمليات المنطقية، التي يستغرق حساب كل منها ٦,٥ نانوثانية فقط بالحواسيب أسرع بمئة مرة من سرعة حدوث الضوضاء في عمل الكيوبتات، الأمر الذي يسمح بتجاهل تأثير الضوضاء على جهاز الكمبيوتر.

يذكر أن هناك عدة أنواع من الكيوبتات، بصفتها مثيلات كمومية لببتات الكمبيوتر المبنية على أساس الموصلات الفائقة والذرات أو الأيونات المفردة وأشباه الموصلات، ولا تزال الأنواع الثلاثة الأولى من خلايا الذاكرة تقود «السباق الكمومي» الخاص بتصميم المزيد والمزيد من أجهزة الحوسبة المعقدة، نظرا لأن عملها أكثر ملاءمة للتحكم، مع ذلك فإن الكيوبتات من هذا النوع ترتكب أخطاء أقل في الحسابات.

وتنحصر إحدى العقبات الرئيسية التي تمنع التطوير اللاحق لمثل هذه الحواسيب في أنها تقضي الكثير من الوقت في القيام حتى بأبسط العمليات

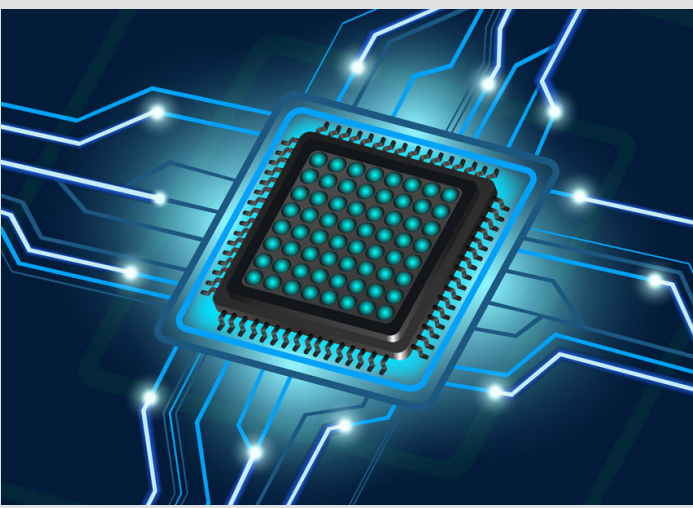
ميت مات للفنان العراقي علي عبد النبي الزيدي تفوز بالجائزة الكبرى في مهرجان مسرح الرحالة في الأردن

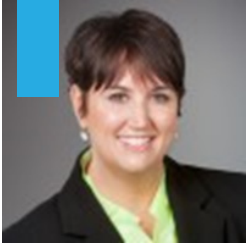
أحمد سميسم

الحضور بأدائه». وأشار إلى أن «نمط المسرحية إنساني، تجمع بين الشرق والغرب من خلال تقديم شخصية (غودو) وشخصية (مولاي)، لتتناول فكرة الانتظار السلبي الذي لا يمكن أن يحل القضايا الاجتماعية وعجز الإنسان عبر تطلعاته وتفكيره للحياة من خلال النمط السائد في المجتمعات العربية». ولفت إلى «مشاركة خمس دول عربية في المهرجان وهم العراق والمغرب والأردن وفلسطين وسوريا، وقد قدمت العروض المسرحية في الفضاءات المفتوحة في المسرح بحضور جمهور عربي كبير.»

فازت مسرحية «ميت مات» من تأليف وإخراج الفنان العراقي علي عبد النبي الزيدي بالجائزة الكبرى لأفضل عرض مسرحي متكامل في مهرجان مسرح الرحالة للفضاءات المفتوحة في الأردن.

وقال الزيدي في تصريح لوكالة الأنباء العراقية (واع)، «افتخر بفوز مسرحية (ميت مات) في مهرجان مسرح الرحالة في الأردن، ووصولها على الجائزة الكبرى لأفضل عرض مسرحي بجدارة». وأضاف: «كما حصلت المسرحية أيضا على جائزة ثانية في حفل التمثيل، ذهبت إلى الفنان العراقي مخلد جاسم بجائزة أفضل ممثل الذي أبهر





By: Kelly Munson, President, Aetna Medicaid at Aetna, a CVS Health Company

July 30 marked a critical health care milestone. In 1965 — 57 years ago from Saturday — Medicaid was signed into law. In recognition of this day, I'd like to reflect on the difference Medicaid has made in the lives of many, Aetna Better Health's ongoing dedication to serving our Medicaid members over the past 30+ years, and next steps to help Medicaid have an even greater impact.

First, some history. Medicaid started in the 1960s amid the civil rights movement as a health insurance program for those receiving cash assistance, including parents, children, people with disabilities and poor older and blind Americans.

Nearly six decades later, the program is the single largest health insurer in the U.S. and continues to evolve to make health care more affordable and higher quality for millions of Americans in need. It's important to note that some of our Aetna colleagues and their families have been Medicaid beneficiaries at some point in their lives and they bring their lived experience and that richness to serving our members every day.

Thoughtful investments needed

High-quality and accessible health care for Americans on Medicaid requires continued investment by the federal and state governments, and close collaboration between managed care organizations (MCOs) and the communities they serve.

While 39 states have expanded Medicaid, the remaining states have yet to expand the program. Greater expansion will not only bolster accessibility and affordability, but it will reduce disparities, improve overall health outcomes, and support the sustainability of the safety net.

Reflecting on Medicaid's 57th birthday



What's more, Medicaid has become our nation's de facto long-term care program, and people with long-term care needs have a better quality of life when services are provided in the settings of their choice, which is often their own home. Home and community-based services are worth the investment, so we can meet the needs and desires of these individuals and their families.

To tackle these complex and intertwined health challenges, beneficiaries deserve care management capabilities that are personalized, coordinated, and focused on total health. As such, MCOs like Aetna, play an important role in the future success of Medicaid. Whether it's assisting a member in keeping their insulin cold through refrigeration or helping a parent find local resources to feed their family, MCOs help our communities become and stay healthy.

Collaborative Medicaid managed care

The future success of the Medicaid program also depends on hyper-local collaborations between MCOs and community organizations, such as those who address food insecurity, affordable housing, and transportation, as well as strong teamwork with our network of providers. All of these collaborations are essential and empower members

to take more control of their health care.

That's why CVS Health and Aetna invest in foster youth workshops in West Virginia to empower teens, establish Workforce Innovation and Talent Centers (WITCs) to increase meaningful employment opportunities, and invest in affordable housing, with \$185 million in housing investments in 2021 to address housing insecurities and increase access to health care services. These are examples of what managed care and MCOs like Aetna can deliver to Medicaid programs and communities. We bring an understanding that health and wellbeing go beyond traditional health care.

Coordination between federal, state, MCO, provider and community resources makes a difference for individuals and families with challenges such as those related to housing, food insecurity and behavioral health. Continued investment and collaboration can help Medicaid remain successful over the next 57 years. Together we can help people live healthier lives.

Medicaid benefits so many. How has it benefitted your life or the life of someone you know? Share your stories and comments below.

New Discovery Could Lead to Improved Cancer Treatment



Washington State University: Previously regarded merely as an immune system helper, a kind of white blood cell now seems to be the initiator of the body's defenses against cancerous tumors. The finding could improve cancer immunotherapy, a promising treatment that targets cancer cells using the body's own immune system rather than radiation.

Researchers from Washington State University discovered in an animal study that a population of T cells known as CD4-positive helper T cells contributed to the initiation of a chain of antitumor immunity defenses that improves the ability of killer cells to infiltrate melanoma and breast cancer tumors. T cells are a subset of white blood cells called lymphocytes, which circulate all throughout the body via the lymphatic system. The involvement of a specific subset of killer cells known as CD8-positive T cells has been the focus of several prior studies as well as contemporary immunotherapies. However, fewer than 20% of patients react to such treatments, and Hui Zhang,

the study's lead author, suggested that the CD4-positive helper cells' initiating role could improve those treatments. The findings were recently published in the *Journal of Immunology*.

"One of the most challenging parts of current cancer immunotherapy is the low response rate," said Zhang, a WSU assistant professor of pharmaceutical sciences. "The lack of knowledge of how to enhance lymphocyte infiltration into the tumor hampers the success of improving the response rate to cancer immunotherapy. Our finding shows promise in solving this problem."

Cancer is the second leading cause of death both nationally and worldwide. Currently, surgery, chemotherapy, and radiation therapy are the conventional approaches to cancer treatment. However, those approaches cannot cure many cancers because some become metastatic, spreading from the primary tumor throughout the body, and certain cancer stem cells can become resistant to chemotherapy and radiation.

A relatively new treatment, immunotherapy has shown promise in curing a range of cancers, but only a relatively low number of patients respond to it. Zhang's research team hopes to change that with the knowledge of the mechanisms that help start the body's immune defenses.

The immune system has two types of killer cells: the CD8-positive T cells, and so-called "natural killer" cells. Both can attack virally infected cells and cancer cells.

Natural killer cells are innate and roam around the body. They act as the first line of defense in our immune system but cannot recognize specific antigens — toxins or other foreign substances in the body — on their own. After the natural killer cells start to work, the CD8-positive T cells, which can recognize specific antigens, arrive. While CD8-positive T cells and their mechanisms have been well studied and are used in current immunotherapies, not much is known about how to activate natural killer cells' antitumor function.

Using genetic knock-out mice experiments, Zhang's group

found evidence that a certain type of CD4-positive T cells, called tissue-resident memory T cells, may be critical in activating those first lines of natural killer cell defenders. Their experiments showed that they were effective against both melanoma and breast cancer tumors.

"We found that this specific population of CD4 T cells were the key player to initiate the antitumor immunity," said Zhang.

The specific CD4 T-cells together with the natural killer cells not only killed tumor cells and controlled tumor progression but also enhanced infiltration of other white blood cells, or lymphocytes, into the tumor.

In future studies, the researchers plan to continue to investigate the precise cellular and molecular mechanisms of this antitumor immunity—first in mice to develop an effective cancer immunotherapy. Then, the team hopes to move on to clinical trials in human subjects.

"Our goal is to develop a powerful cancer immunotherapy approach that is effective for all patients with different types of cancer," said Zhang.

Sources: SciTechDaily



Gov. Whitmer Virtually for Signing of CHIPS Act Executive Directive

President Biden joined Governor Whitmer, elected officials, and representatives from Hemlock remotely for the signing of an executive directive guiding the implementation of the CHIPS Act, which will boost domestic chip production and bolster Michigan's leadership in the semiconductor industry.

On August 2, 2022, an executive directive guiding the implementation of the CHIPS Act was signed into law by Governor Whitmer at Hemlock Semiconductor Operations (HSC), based in Michigan. Whitmer was joined virtually by President Biden, elected officials, and semiconductor industry leaders. As the largest producer of polysilicon in the U.S., Hemlock's longstanding presence in Michigan contributes to the state's leadership position in the semiconductor supply chain.

"The bipartisan CHIPS and Science Act will make a once-in-a-century investment in American industry to create and protect tens of thousands of jobs, bring supply chain from China to Michigan, and help lower costs for working families on electronics, cars, and so much more," said Governor Whitmer. "The ongoing chip crisis is having a stark impact on Michigan. We need to move fast, which is why I signed an executive directive today preparing Michigan to harness every available resource from the CHIPS and Science Act to set up our state for decades of growth. I will fight hard to ensure that Michigan brings home as many resources as possible from the CHIPS and Science Act, and I look forward to unleashing our state's potential. Let's keep putting the world on notice and show everyone that Michigan



is the place to build the future."

The executive directive marks a vital step toward increasing domestic chip production near automakers and other manufacturers helping to spur innovation, reduce inefficiencies and avoid costly delays. By securing a robust semiconductor supply chain in the state – anchored by existing Michigan companies including Hemlock Semiconductor Operations, SK Siltron CSS, KLA, and Calumet Electronics – Michigan stands to attract long-term, sustainable investments from companies around the world.

"This is a critical moment for the United States and Michigan in particular as we work to earn transfor-

mational investments for our state, create good jobs for Michigan workers and more opportunities for small businesses," said Michigan Economic Development Corporation CEO Quentin Messer Jr. "I am proud of Governor Whitmer and our bi-partisan Federal Delegation leadership in working tirelessly to encourage the passage of this legislation. The signing of the executive directive in Michigan reminds the world again of our global manufacturing and automotive R&D leadership, and the fact that leading consumers of semiconductors call Michigan home on both peninsulas."

District welcomes senior citizens to events with Premier Citizens cards

Dearborn Public Schools has a tradition of welcoming and encouraging senior citizen residents to attend school events by offering free admission and other special discounts via the Premier Citizen Discount Card.

District residents over the age of 60 can stop in to any Dearborn Public School or the Administration Building, 18700 Audette St., to pick up this year's Premier Citizen Discount Card. Residents who picked up cards last year will notice those cards are still good until September 2023.

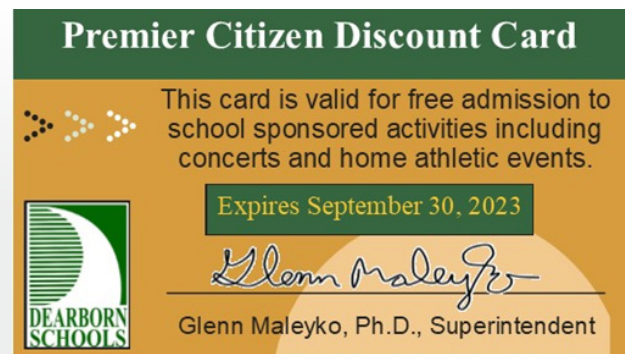
"Many local residents in the over 60 crowd are Dearborn Public Schools alumni, parents of former students or grandparents to current students. We are happy to welcome them back to school," notes Dearborn Public Schools Superintendent Glenn Maleyko. "With the Premier Citizen Discount Card, senior residents can enjoy discounts or free admission to school programs, including home sporting events and musical performances."

The Premier Citizen Discount Card is free and offers great dis-

counts on school activities and school merchandise including:

- Free admission to most school-sponsored activities including concerts and athletic events at the home school. Discounted tickets are available for plays and musicals, which are not free because schools must pay for performance licenses.
- Discounts on select Community Education classes.
- 10% discount on merchandise sold at school stores. (Limit four items per year.)

"Community members will be proud of the accomplishments of the young people in their neighborhood," Dr. Maleyko added. "We hope that everyone over the age of 60 will pick up a Premier Citizen Discount Card



and take advantage of the free admission and discounts to have an entertaining or informative experience in the Dearborn Public Schools."

6 Scientifically Proven Health Benefits of a Plant-Based Diet

New study argues that all doctors should be aware of the benefits of plant-based diets for these six health conditions.

According to a recent commentary in the American Journal of Lifestyle Medicine, all doctors should be aware of the advantages of a plant-based diet for six different health conditions, including COVID-19, diabetes, cancer, cardiovascular disease, and weight loss.

"The field of medicine, despite its prominent influence in society, has invested little to promote healthy lifestyle choices," says the commentary co-authored by Saray Stancic, MD, FACLM, director of medical education for the Physicians Committee for Responsible Medicine. "The consequence of this is reflected in our ever-rising chronic disease statistics, most notably obesity and diabetes rates."

The authors claim that medical schools only provide a meager level of nutrition education throughout the course of four years and that this situation is not improved during postgraduate study. They point out that 90 percent of cardiologists who participated in a recent study of over 600 cardiologists said they had not obtained the necessary nutrition education during training. The commentary accepts that not all doctors need to be nutrition specialists, but asserts that they should at the very least have a basic understanding of the advantages of a plant-based diet for these six conditions, for which they present detailed evidence, including the following:

1. Weight loss and maintenance. Those who followed a vegan diet

weighed around 9 pounds less than those who did not, according to a study of 70,000 individuals. They also had a lower risk of death.

2. Cardiovascular disease. Animal products are high in saturated fat and cholesterol, which are key drivers of cardiovascular disease. But a recent meta-analysis found that those consuming a vegetarian diet decreased LDL "bad" cholesterol by 13 mg/dl. Another analysis found a 24% lower rate of heart disease deaths among vegetarians compared to omnivores.

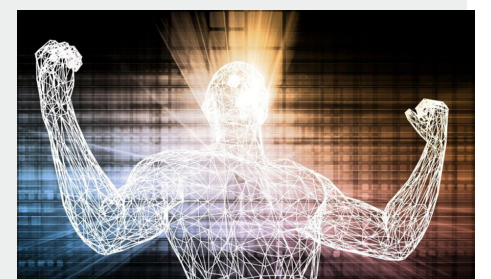
3. Cancer. Adopting healthy habits, such as being active and eating a diet high in fruits, vegetables, and whole grains may potentially lower the risk of breast cancer by up to 70%. Furthermore, studies have shown that soy and high-fiber diets lower the risk of breast cancer. Prostate cancer risk is increased by diets heavy in dairy products. Although daily consumption of red and processed meat raises the risk of colorectal cancer, high-fiber diets reduce that risk.

4. Diabetes. A Harvard study, which included participants from the Health Professionals Follow-Up Study, Nurses' Health Study, and the Nurses' Health Study II, concluded that those who consumed a plant-based diet could expect a 34% reduction in type 2 diabetes risk.

5. Alzheimer's disease. A study found that those who adhered to the primarily plant-based Mediterranean-DASH Diet Intervention for Neurodegenerative Delay (MIND) diet, which is focused on brain-healthy foods such as green leafy vegetables, other vegetables, beans, berries, nuts, and whole grains, had a 60% lower risk of Alzheimer's disease.

6. COVID-19. Harvard's smartphone-based COVID-19 study found

that in those who consumed a primarily plant-based diet there was a 41% reduction in risk of severe COVID-19 as well as a 9% reduction in infection of any severity. "It is time for all physicians across the globe to speak to the importance of diet and lifestyle in health," concludes the commentary, which recommends that physicians do this by counseling patients, assuring hospitals provide healthy menus, lecturing in the community, writing articles, using social media, and providing commentary to media.



David Giles: Seeing the light

The Michigan Medical Scientist Training Program (MSTP) offers students the opportunity to combine an MD and PhD in any field related to medicine. About 10-12 fellows are admitted each year to this competitive program. They choose research areas ranging from traditional biomedical sciences to other less conventional fields like anthropology and philosophy.

G4 David Giles is in his fourth year of the Immunology PhD program. He works with Dr. Benjamin Segal to study the role of the immune system in multiple sclerosis using an animal model. He plans to defend his thesis in the next year, which addresses how one type of immune cell changes properties during the course of disease and contributes to disease pathogenesis.

Here he answers 10 questions about his MSTP journey and the people who have mattered in the process.

How did you find out about the Michigan MSTP?

I lived in Ann Arbor for a few years when I was very young, so I've known about the character and uniqueness of the University almost since birth. I started learning more specifically about the Michigan MSTP when I began to research MD/PhD programs. I was first drawn to the quality of the research. Michigan has an incredible breadth and depth of research. If you imagine a research topic, there is probably someone studying it at Michigan and studying it well.

What do you like about being a physician scientist?

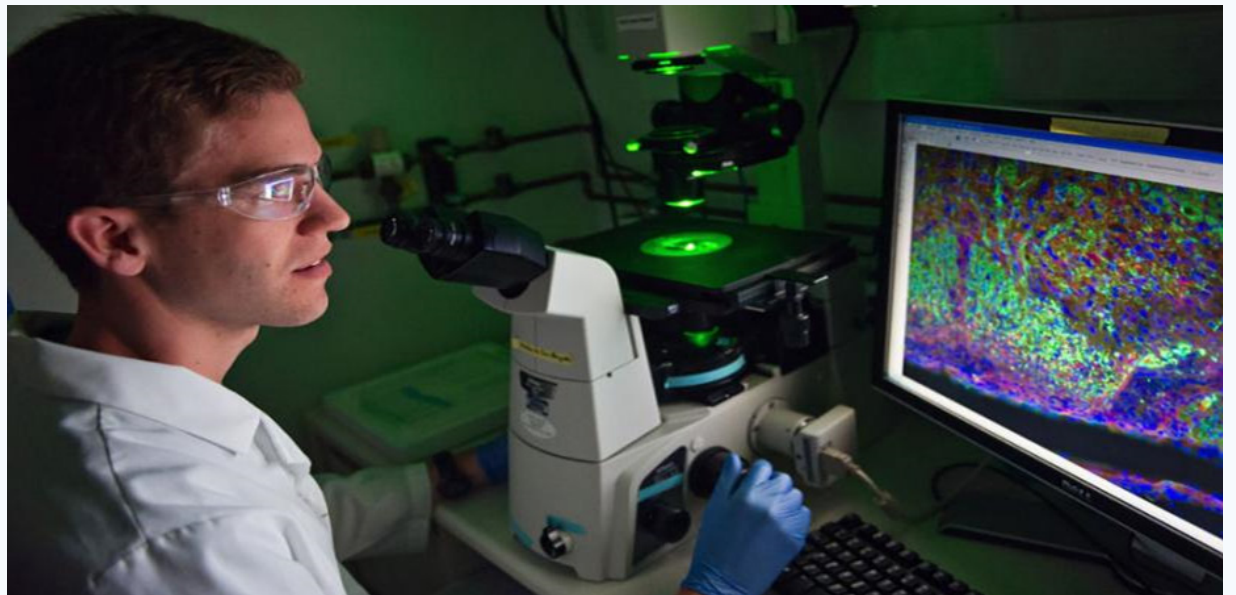
As a scientist, I love the discovery. Through my experiments, I know things about how the world works that no other human being knows. As a future physician, I love caring for people. Being a physician scientist lets me put those passions together. I get to translate discoveries into making real impacts on people.

What preparation and research experience did you have before applying to the Michigan MSTP?

I majored in biomedical engineering in undergrad, and the first course in this major introduced me to the idea of biomedical research. The following two summers, I volunteered in a research lab, and then I pursued research during the school year as well. By the time I applied, I had done significant, independent work on two separate projects in different labs. Neither project resulted in a publication for me, but the knowledge and experience provided a strong foundation for my current work.

Did you rotate in labs related to this area of research or did you explore other options?

I came to Michigan thinking I would study neurodegenerative diseases and did my first rotation in this field. In the first year of med school, though, I was introduced to immunology. Lots of people try to study immunology but few have the tools and training to do it well. I wanted a lab where I could train to be an immunology expert. Because of the diverse research opportunities at Mich-



igan, I had plenty of options. I did my second rotation in a neuroimmunology lab and have continued in this lab for my thesis. My mentor challenges me to be creative and gives me a lot of freedom to explore and test ideas. My labmates are supportive and a joy to be around. This combination of great research and great people (it does take both) has really made for a positive grad school experience.

What has the transition been like between the MD and PhD phases of the MSTP curriculum?

I really enjoy bench research, so I looked forward to the transition. Med school has a lot of structure, but grad school allows for more freedom. This can be difficult for some, but the Michigan MSTP has terrific resources and faculty support to ease this transition.

Have you had any "a-ha" moments?

All the time! I get excited about any new thing I learn, no matter how small. My labmates sometimes make fun of me for this, but I get really excited when ideas start connecting. I'm an optimist by nature, so that bump of excitement provides fuel to carry me over the failures.

How does the structure of Michigan's MSTP support your research efforts?

The Michigan MSTP provides great flexibility, so I could make choices that match my needs and career goals. For example, I did a research rotation before the start of med school. This is optional, but I appreciated the opportunity to jump right into research and life in Ann Arbor before med school classes started. The Michigan MSTP was eager and able to accommodate.

The Michigan MSTP is great for networking because you have peers in almost every department. I have given and received advice and reagents from several

other people in the program who work in completely different areas. I am introduced to faculty as well through our regular seminars and retreats.

What do you like to do outside of the lab/classroom?

I enjoy the outdoors and compete in triathlons. There are several people in the program who share these interests, too. In past few years, I have joined several other MSTPs in doing a marathon, half ironman triathlons, and a 100 km trail relay race. The program gives us the time and flexibility to train for these events, and the community is such that I can find these friends across the program.

What would you say to a prospective student about the benefits of attending the University of Michigan as an MSTP?

The best thing about Michigan is the people. Lots of places have great research, but few places have the quality of people. Both faculty and students seem to value life balance. Everyone I know has hobbies and outside interests that they enjoy, and Michigan gives us the freedom to keep pursuing those while in med school or grad school. When the focus is not solely on academics and advancement, the environment becomes a lot more collegial. Spend an afternoon talking with the students and faculty, and you will understand what makes the Michigan MSTP special.

What are you looking forward to next?

The next step for me is returning to the hospital. I've seen my med school classmates go through all the clerkships and heard their stories. Now I'm excited for my opportunity.

Sources: University Of Michigan

New art installation at U-M Museum of Natural History explores unseen world of microorganisms

With COVID-19, microorganisms have migrated from natural science and medicine onto center stage in politics, history, and civil society.

Through the artistry of Jim Cogswell, microorganisms can now be seen in a colorful mural on the windows of the University of Michigan Museum of Natural History.

"Unseen Worlds" magnifies the world of microorganisms and mirrors visitors' movements as the vinyl elements wrap their way around the glass exterior of the building.

Cogswell, an Arthur F. Thurnau Professor and professor at U-M's Penny W. Stamps School of Art & Design, has been working on this project for more than three years.

"The Biological Sciences Building was designed to represent science, but from the outside you may not know that," Cogswell said. "My job was to put the science on the exterior."

Using images from scientific research, Cogswell made ink paintings of more than 350

microorganisms such as radiolaria, diatoms, hydra, worms (annelids) and a wide variety of planktonic creatures. With the help of Stamps School students, the paintings were transferred to a digital format then sent to a fabricator to create machine-cut vinyl film.

The 1,700-square-foot mural is assembled from multiple elements, each color cut from a different roll and applied as individual pieces to the windows. The color permeates the vinyl material, making it equally vibrant from both the inside and out. With varying degrees of transparency, the artwork responds to the intensity of light determined by weather and time of day, bathing viewers in shifting sensations of color and shadows.

"Our hope is that visitors will be drawn to these delightful, human-scale microorganisms and want to discover how these

unseen elements impact our world," said Amy Harris, museum director. "This installation serves as an invitation to discovery."

Three students were instrumental in the research, development and execution of the project: Sky Christoph (Stamps), Kai Hamill (Stamps) and Beverly Fu (LSA). In addition, Cogswell worked with U-M faculty in cell and developmental biology, ecology and evolutionary biology, internal medicine and physics, and at the U-M Biological Station.

"Unseen Worlds" will be on view through 2023.



Ai Could Help Patients With Chronic Pain Avoid Opioids

By: Nardy Baeza

Cognitive behavioral therapy is an effective alternative to opioid painkillers for managing chronic pain. But getting patients to complete those programs is challenging, especially because psychotherapy often requires multiple sessions and mental health specialists are scarce.

A new study suggests that pain CBT supported by artificial intelligence renders the same results as guideline-recommended programs delivered by therapists, while requiring substantially less clinician time, making this therapy more accessible.

“Chronic pain is incredibly common: back pain, osteoarthritis, migraine headaches and more. Because of pain, people miss work, develop depression, some people drink more alcohol than is healthy, and chronic pain is one of the main drivers of the opioid epidemic,” said John Piette, a professor at the University of Michigan’s School of Public Health and senior research scientist at the Veterans Administration.

“We’re very excited about the results of this study, because we were able to demonstrate that we can achieve pain outcomes that are at least as good as standard cognitive behavioral therapy programs, and maybe even better. And we did that with less than half the therapist time as guideline-recommended approaches.” Traditionally, CBT is delivered by a therapist in 6 to 12 weekly in-person sessions that target patients’ behaviors, help them cope mentally and assist them in regaining functioning.

“Unfortunately, many people with pain don’t have access to these programs, and multiple weekly sessions is a deal breaker for people who have competing demands like jobs and family responsibilities,” Piette said.

As a consequence, some patients look to medications to treat their symptoms or simply drop out of care before achieving benefit, he said.

Piette and colleagues recruited 278 patients



with chronic back pain and randomized them into two groups. One group received standard CBT through 10 45-minute telephone sessions with a therapist. The other group received the AI-supported therapy, in which they reported their symptoms via brief, daily automated calls. Based on how they were doing, the AI-supported program recommended a 45-minute or 15-minute therapist session or a fully automated session covering similar content but without the need for a therapist to be present.

At three months, patients’ pain intensity and pain interference were just as good with the AI-supported program, and at six months, substantially more patients in the AI-supported group had clinically important improvements in their outcomes, Piette said.

Eighty-two percent of patients in the AI-CBT group completed all 10 weeks of treatment, compared to 57% of patients who were offered 10 weeks of telephone counseling by a therapist.

“Despite receiving more weeks of treatment, the AI-supported program used less than half the ther-

apist time, meaning that we could double the number of patients who can be treated with the same number of clinicians,” Piette said. “This finding could have a dramatic impact on how we think about delivering psychotherapies for people with pain.”

Piette said that similar CBT approaches are used for other common problems such as depression, anxiety and post-traumatic stress. This approach could make those services much more accessible as well, despite a shortage of therapists, he said.

“Artificial intelligence can help figure out how to provide each person as much attention as they need, while ensuring that we’re not expending scarce resources with patients who don’t benefit from them,” he said. “Not everyone needs the same amount of therapist time; some need more while other patients can achieve benefits with a lighter touch. AI can help us target those services where they can help the most.”

FREE OPINION PRESS, LLC

ESTABLISHED
DECEMBER, 2016
DEARBORN MICHIGAN

INDEPENDENT ARAB
AMERICAN YOUTH
COMMUNITY NEWSPAPER
IN BOTH
LANGUAGES ARABIC AND
ENGLISH PUBLISHED BY
ARAB AMERICAN YOUTHS
MICHIGAN, USA

EDITOR IN CHIEF:
DR. AFRAH ALI
PHD. POLITICAL SCIENCE

CONTRIBUTING WRITERS:
NOOR AHMED
AKRAM ALI

DESIGNER:
AHMED ALI

THE FREE OPINION PRESS IS
EDITORIALLY INDEPENDENT
MEDIA THAT DEDICATED TO
COVER THE NEWS OF THE
YOUTHS COMMUNITY ACTI-
VITIES AS WELL AS NATIONAL
NEWS WITHOUT REGARD
TO RELIGIONS, POLITICAL,
NATIONALITY AND ETHNICITY.

Medical students create mask to share implicit biases and professional identities

The Wayne State University School of Medicine’s Warrior M.D. Class of 2026 participated in a service learning project focused on thinking about the formation of their professional identities as they navigate the next four years of medical school.

The activity was held Aug. 3 in the school’s Scott Hall Cafeteria. Another session is planned for Aug. 24 at 5:30 pm in the cafeteria.

The Service Learning Project was directed by Associate Professor Emeritus Jennifer Mendez, Ph.D.; Co-Director of Service Learning Seg 1A Rima Charara, Pharm.D.; and Atta Illahi, project coordinator. Class of 2023 university counselor Jennifer Crystal, Ph.D. led the students, to share through discussions, how their identities impact biases. Wayne State Art Collection Curator Grace Serra, demonstrated to students how masks have been used to aid humans in dealing with important life-changing events, and how they reflect the concepts of self. The students were shown works from the Wayne State University Art Collection to learn how culture and masks from Africa, Polynesia and Mexico define identity.

Vice Dean of Medical Education Richard Baker, M.D., speaks with students at the activity.

“This mask-making project was far more than a craft project. Its intention was to help students begin think about their own identities as future physicians and to develop awareness of implicit

bias,” Serra said. “I was thrilled to have had the opportunity to feature artworks from Wayne State University’s art collection that connected so well to this project.”

The activity was inspired by “Examining Professional Identity Formation Through the Ancient Art of Mask-Making,” a 2019 article in the Journal of General Internal Medicine about a similar mask-making curriculum as a form of reflective expression. Using dedicated prompts, students at Penn State University School of Medicine used a blank papier-mache mask to create a representation of their sense of self in the broader context of medical education.

At Wayne State, the medical students, working in groups, used magazines, art supplies and a blank white mask to design the inside masks to show their personal fears, uncertainties and biases. The outside of the mask focused on what others see when interacting with them.

Green House members of the Class of 2026 show of the front of their finished mask.

“Others may see us as ‘resilient,’ ‘strong,’ ‘worthy,’ ‘smart’ and having ‘determination,’ but we too are human and are left feeling like an imposter at times as a result of this facade we carry when we hit our lows,” said Angelica Cabatu, a member of the class of 2026. “I believe that versing this now in our training will help us remember later on that our patients too will have this mask which we must be cognizant of to meet their needs as both a patient and as a human being.”

The project outlined in the journal article proved to be a safe and engaging way for students to explore their developing sense of self within the community of medical practice. A similar reaction was received at the WSU School of Medicine.

“This event served as a lesson to me that there are two faces to a medical student, or to anyone for that matter, when we were given the task to create a mask that represents how others may perceive us on the outside and what we do not necessarily portray to others on the inside,” Cabatu added. “As a team activity, we discussed among each other what we should put on both sides. To my surprise, I found an odd sense of comfort that others in my group hide the same weaknesses as me. To know that we all at one point, or multiple points, have cried from feelings of ineptitude or experienced stress from our training thus far that has led us to question why we chose this journey reminded me that we are not alone in these sentiments, despite what we portray on the outside.”



Dean Wael Sakr, M.D., speaks with students about the project.

Sources: Wayne State University