







REPUBLIC OF THE PHILIPPINES  
REGIONAL TRIAL COURT  
FOURTH JUDICIAL REGION  
Branch 39, Bacoor City

**IN RE: PETITION FOR ADOPTION  
OF MINOR CZARINA JOYCE  
CHAVEZ SAPLAN**

BSP-2019-181

**SPOUSES IAN JOHN G. MOLO  
AND ESTELA T. CATALUNA  
MOLO,**

Petitioners

**AMENDED ORDER**

The above-entitled case is a petition for the adoption of minor Czarina Joyce Chavez Saplan filed by spouses Ian John G. Molo and Estela T. Cataluna-Molo.

NOTICE IS HEREBY GIVEN that the said petition is set for hearing on **February 5, 2021, at 7:00 in the afternoon.** All persons interested are directed to appear and show cause why said adoption should not be granted.

Let the Order be published once a week for three (3) consecutive weeks in a newspaper of general circulation in the Province of Cavite.

Ms. Mercedes Cuervo, Social Worker of this Court, is ordered to conduct an investigation relative to this petition and to prepare and submit the corresponding Child and Home Study Report.

Furnished copies of this Order and Petition the Office of the Solicitor General, the City Civil Registrar of Bacoor, Cavite, the Department of Social Welfare and Development (DSWD) Field Office IV-A, Alabang, Muntinlupa City and the Philippine Statistics Authority.

**SO ORDERED.**

DONE IN CHAMBER, Bacoor City, Cavite June 01, 2020

(Sgt) **AMALIA S. GEMAIPOS-RICABLANCA**  
Assisting Judge

**Copy Furnished**

Atty. Alex B. Tanguerra - Tanguerra Law Offices,  
Unit A-2, Ed-Com Bldg. Good Shepherd Ave.,  
Palace II, Imus City, Cavite

The Solicitor General  
134 Amorsolo St., Legaspi Village, Makati City

Office of the City Prosecutor of Bacoor City

City Civil Registrar of Bacoor City, Cavite

Department of Social Welfare and Development (DSWD),  
Field Office IV-A  
Alabang Zapote Road, Muntinlupa City

Philippine Statistics Authority  
Sulicard Building 1 and II,  
Ramon Magsaysay Blvd., Sta. Mesa, Manila

Word Copies of the Petition and its attachments were already sent to the said offices together with the Order dated December 18, 2019

Publication: **DIYARYO KABITENYO**  
Date: January 11, 18 & 25, 2021

No guy has a magic.  
Magic is in the heart of the girl loving the guy who  
can send her whole being up in 'Cloud Nine' even  
with the mere touch on her fingertips.  
-Arnold S. Barco

REPUBLIC OF THE PHILIPPINES  
FOURTH JUDICIAL REGION  
REGIONAL TRIAL COURT  
BRANCH XIX  
BACOOR, CAVITE

**IN THE MATTER OF PETITION  
FOR CANCELLATION OR CORRECTION  
OF ENTRIES IN THE CIVIL REGISTRY  
(RULE 108)**

**ROBERT G. NOLASCO,**

Petitioner

BSP-2020-100

-versus-

**LOCAL CIVIL REGISTRAR GENERAL and  
THE CIVIL REGISTRAR OF THE CITY OF  
BACCOOR, CAVITE,**

Respondents

**NOTICE OF HEARING**

There is a petition filed by petitioner then counsel for the cancellation or correction of entries in the Civil Registry on the grounds alleged therein.

NOTICE IS HEREBY GIVEN that said petition has been set for hearing on **January 29, 2021** at 8:30 in the morning before this Court, on which date, hour, and place, any person interested is cited to appear and show cause why the same should not be granted.

Let this Notice be published once a week for three (3) consecutive weeks in a newspaper of general circulation in the cities and province of Cavite.

Let a copy of this Notice and that of the petition be furnished the Office of the Solicitor General, Makati City, Local Civil Registrar of Bacoor City, Cavite and the Philippine Statistics Authority, Quezon City.

WITNESS THE HONORABLE **ARNEL G. ESPERITIL**,  
Judge of this Court 3rd day of December, 2020 at Bacoor,  
City, Cavite, Philippines.

(Sgt) **ATTY. MELY C. HERMOSURA-VISTA**  
Branch Clerk of Court

Publication: **DIYARYO KABITENYO**  
Date: January 11, 18 & 25, 2021

### Fried food intake linked to heightened serious heart disease and stroke risk

Fried-food intake is linked to a heightened risk of heart disease and stroke, finds analysis of available research published online in the journal Heart. And the risk rises with each additional 114 g weekly serving. The analysis indicates it's clear that the Western diet doesn't promote good cardiovascular health, ipants and 36,727 but it's not clear exactly what contribution fried food might make to the risks of serious heart disease and stroke, say the researchers. To shed some light on this, researchers trawled databases, looking for relevant studies published up to April 2020, and found 19. They pooled the data from 17, involving 562,445 participants

### EXTRA JUDICIAL SETTLEMENT OF ESTATE OF AGRIPINO TUMAGAY AMBAT AND GLORIA PATAWE AMBAT WITH DEED OF ABSOLUTE SALE

NOTICE is hereby given that the estate of the deceased **AGRIPINO TUMAGAY AMBAT** and **GLORIA PATAWE AMBAT**, who both died intestate on November 11, 2001 and February 2, 1999, at Silang, Cavite, respectively, consisting of two parcels of land located at Brgy. Cabungaan, Municipality of Silang, Province of Cavite, covered by Transfer Certificate of Title No. (T-37629) 9189, of the Registry of Deeds for Tagaytay City, and Tax Declaration of Real Property with TD No. 18-0021-00026, containing area of SEVEN THOUSAND FOUR HUNDRED NINETY EIGHT (7,498) SQUARE METERS, more or less, and TEN THOUSAND (10,000) SQUARE METERS, respectively, has been adjudicated and extra-judicially settled by and among their heirs in equal shares; and, for and in consideration of the sum of Five Million Two Hundred Forty Nine Thousand Four Hundred Pesos (Php5,249,400.00), Philippine Currency, they do hereby **SELL, TRANSFER, CONVEY and DELIVER**, by way of **ABSOLUTE SALE** into **ZIMLA MORIA DEVELOPMENT CORPORATION** the Transfer Certificate of Title No. (T-37629) 9189 and Tax Declaration of Real Property with TD No. 18-0021-00026 on December 17, 2020 at Trece Martines City before Notary Public Atty. Carla N. Cloa and entered in her Normal Register as Doc. No. 113, Page No. 23; Book No. XLIX, Series of 2020.

(Sgt) **REYNALDO PATAWE AMBAT**  
as Heir/Seller/Attorney-in-Fact and **ZIMLA MORIA DEVELOPMENT CORPORATION** as Buyer

Publication: **DIYARYO KABITENYO**  
Date: January 11, 18 & 25, 2021

disvascular health, ipants and 36,727 but it's not clear exactly what contribution fried food might make to the risks of serious heart disease and stroke, say the researchers. To shed some light on this, researchers trawled databases, looking for relevant studies published up to April 2020, and found 19. They pooled the data from 17, involving 562,445 participants and 36,727 major cardiovascular 'events', such as heart attack or stroke, to assess cardiovascular disease risk. And they pooled the data from six, involving 754,873 participants and 85,906 deaths over an average period of 9.5 years, to assess the potential link between fried food consumption and deaths from cardiovascular disease and from any cause.

Republic of the Philippines  
Province of Cavite  
Municipality of Ternate  
OFFICE OF THE MUNICIPAL CIVIL REGISTRAR

RA Form No. 111 (LCRD)

**NOTICE FOR PUBLICATION**

In Compliance with Section 5 of RA 9048, a notice is hereby served to the public that **RIZA INAMBUANG CASUAT** has filed in this office a petition for Change of First Name from "**CONRADO**" to "**JUNIE**" in the **Certificate of Live Birth** of **CONRADO ZAPANTA CASUAT** who was born on **JULY 14, 1966** at **TERNATE, CAVITE**, and whose parents are **CONRADO RAMOS CASUAT** and **FELIPINA NINON ZAPANTA**.

Any person adversely affected by said petition may file his written opposition with this office not later than **01 February 2021**.

(Sgd.) **MARIETA R. LOZANO**  
Municipal Civil Registrar

DIYARYO KABITENYO - January 18 & 25, 2021.

## New method heals skeletal injuries with synthetic bone

Researchers at Lund University in Sweden, in collaboration with colleagues in Dresden, Germany, have developed a way of combining a bone substitute and drugs to regenerate bone and heal severe fractures in the thigh or shin. The study, published in the research journal *Science Advances*, was conducted on rats, but the researchers think that the method in various combinations will soon be

at commonplace in clinical settings. "The drugs and materials we used in the study for the regeneration of bone are already approved. We simply packaged them in a new combination. Therefore, there are no real obstacles to already using the method in clinical studies for certain major bone defects that are difficult to resolve in patients. But we want to introduce the technique in a controlled

### EXTRAJUDICIAL SETTLEMENT OF ESTATE with Deed of Absolute Sale

NOTICE is hereby given that the estate of the deceased **VICTORINA L. CUSTODIO** who died intestate on February 26, 2015, married to **ELEAZAR J. CUSTODIO** who died intestate on September 10, 2009 and **ELEUTERIO L. CUSTODIO** who died intestate on February 21, 2008, consisting of two (2) parcels of land without any improvements found thereon, situated at **Bilatan, Gen. Trias, Province of Cavite**, more particularly described as follows:

A. Transfer Certificate of Title TCT No. T-271901 having a total area of **TWO HUNDRED TWENTY (220) square meters, more or less, and**

B. Transfer Certificate of Title TCT No. T-271902 having a total area of **FOUR HUNDRED FORTY (440) square meters, more or less,**

has been adjudicated and extrajudicially settled by and among their heirs,

and for and in consideration of the sum of **FOUR HUNDRED FORTY THOUSAND PESOS (P440,000.00)**, they do **SELL, CEDE, TRANSFER, and CONVEY** and absolutely and unconditionally the parcel of land **LOT A** - covered by TCT No. T-271901 having a total area of **TWO HUNDRED TWENTY (220) square meters, more or less, without any improvements found thereon** in favor of **SPOUSES DENNIS AGUDERA DE LUNA and JOSEPHINE CALATA DE LUNA,**

and, for and in consideration of the sum of **FOUR HUNDRED EIGHTEEN THOUSAND PESOS (P418,000.00)**, they do **SELL, CEDE, TRANSFER, and CONVEY** and absolutely and unconditionally the parcel of land **LOT B** - covered by TCT No. T-271902 having a total area of **FOUR HUNDRED FORTY (440) square meters, more or less, in favor of CRISTINE AREGLO QUILIANO** on December 9, 2020 at Cavite City, Philippines before Notary Public Atty. Sika V. Aghnang and entered in her Notarial Register as Doc. No. 1761, Page No. 44, Book No. 3, Series of 2020.

(Sgd.) **TERESITA CUSTODIO-FERMA** for herself and as **Atty-in-Fact** of **CONSOLACION L. CUSTODIO, CLEMENTE C. CUSTODIO, RIZALISA S. CUSTODIO** for herself and as **Atty-in-Fact** of **JAY JAY S. CUSTODIO, JOCELYN S. CUSTODIO, JOSELITO S. CUSTODIO, and JET A. CUSTODIO** and **DENNIS AGUDERA DE LUNA and JOSEPHINE CALATA DE LUNA, Vendee-Lot A and CRISTINE AREGLO QUILIANO, Vendee-Lot B**

Publication: **DIYARYO KABITENYO**  
Dates: **January 18, 25 and February 1, 2021**

### EXTRAJUDICIAL SETTLEMENT OF ESTATE

NOTICE is hereby given that the estate of the late **LEONARDO CUSTODIO SALVADOR** and **MAGDALENA MAGSINO SALVADOR** who both died intestate on November 15, 2017 at Capt. Novales St., Caridad, Cavite City and on January 2, 2021 at Capt. Villareal St., Caridad, Cavite City, respectively, consisting of a parcel of land with improvements found thereon, situated at **Cor. Capt. Novales and Santiago St., Brgy. 38 (Sampaguita), Caridad, Cavite City**, covered by TCT No. T-10450, containing an area of **SIX HUNDRED FORTY FIVE (645) SQUARE METERS, more or less**, has been adjudicated and extrajudicially settled by and among their heirs equally on January 9, 2021 at Cavite City, Philippines before Notary Public Atty. Sika V. Aghnang and entered in her Notarial Register as Doc. No. 0290, Page No. 79, Book No. 1, Series of 2021.

(Sgd.) **All Heirs**

Publication: **DIYARYO KABITENYO**  
Dates: **January 18, 25 and February 1, 2021**

### EXTRAJUDICIAL SETTLEMENT OF ESTATE

NOTICE is hereby given that the estate of the late **TERESITA SISAYAN GENOVA** who died intestate on April 5, 2011 at Cavite City, consisting of two (2) parcels of land with the improvement found thereon, located at **Brgy. Bural, Muna, Dasmariñas, Cavite**, covered by TCT-1058182, containing an area of **Ninety Six (96) Square meters** and TCT-1058183, containing an area of **One Hundred Forty (140) Square meters** has been adjudicated and extrajudicially settled by and between her heirs with waiver of rights and participation in the above-described property in favor of **ALGEN SISAYAN GENOVA** on December 21, 2020 at Cavite City, Cavite, Philippines before Notary Public Atty. Sika V. Aghnang and entered in her Notarial Register as Doc. No. 1371, Page No. 49, Book No. 5, Series of 2020.

(Sgd.) **Both Heirs**

Publication: **DIYARYO KABITENYO**  
Dates: **January 18, 25 and February 1, 2021**

having been subjected to a major trauma in connection with a traffic accident for example, or a tumour or infection causing a major bone defect. These cases are currently treated through bone transplantation, usually with bone taken from the patient's own pelvis.

"In cases involving severe open fractures healing process,

form via clinical studies and have recently been granted ethical approval," says Deepak Raina, orthopaedic researcher and the lead author of the study. "Bones in the hu-

man body have a fantastic ability to repair injury, but some defects are so large or complicated that the healing process is delayed or absent. This may be due to the bone

in the lower leg, over 5 per cent of all fractures fail to heal. With our method, we will be able to avoid taking bone from the pelvis, which is a major gain for the patient."

"There is a need for new solutions and several research teams, both in Europe and in the USA, are working on improving the bone healing process."



REPUBLIC OF THE PHILIPPINES  
FOURTH JUDICIAL REGION  
REGIONAL TRIAL COURT  
OFFICE OF THE CLERK OF COURT  
TRECE MARTIRES CITY, CAVITE

**BDO UNIBANK, INC.,**  
Mortgagee

Foreclosure Case No. F-13720

**SHEILA ELIGOVO TEJERESAS,**  
Mortgagor

**NOTICE OF EXTRA-JUDICIAL SALE**

Upon Extra-Judicial Petition for Sale under Act 3135, as amended by Act 4118, filed by Mortgagee, **BDO UNIBANK, INC.**, with business address at BDO Corporate Center, 7899 Makati Avenue, Makati City against the Mortgagor, **SHEILA ELIGOVO TEJERESAS**, both of legal age, Filipinos, with residence and postal address at: 1.) No. 521, 2d Boro Serrano Ave., San Roque, Quezon City; and 2.) Blk. 1 Lot 59, Kensington 17, Navarro, Gen. Trías, Cavite to satisfy the mortgage indebtedness as of **01 December 2020** amount to **ONE MILLION NINE HUNDRED EIGHTY-SIX THOUSAND NINE HUNDRED THIRTY-FOUR PESOS AND 46/100 (P1,986,934.46)**, Philippine Currency, (including interest, penalties, and other charges as of said date but exclusive of all the other expenses incidental to this foreclosure and sale, the undersigned Sheriff will sell at public auction on **08 April 2021** at 10:00 o'clock in the morning at the main entrance of the Government Center Bldg. located at the Provincial Capitol Compound, Trece Martires City, to the highest bidder of CASH and in Philippine Currency, the following described property with all the improvements thereon, to wit:

**TRANSFER CERTIFICATE OF TITLE No. 067-2019-099670**

Lot No. 52 Block No. 1 PLAN NO: PCS-04-028598

PORTION OF THE CONS. SUBD OF LOTS 1694, (RS-04-001799) LOT 1699, (RS-04-001841) LOT 1701, (RS-04-002011) ALL OF SAN FRANCISCO DE MALABON ESTATE & LOT 1726-A, LOT 1726-B, LOT 1726-C PSD-04-098877, DECREE NO. 4270, LBC REC. NO. 3964

LOCATION: BARANGAY OF NAVARRO, MUNICIPALITY OF GEN. TRIAS, PROVINCE OF CAVITE, ISLAND OF LUZON

**BOUNDARIES:**

LINE	DIRECTION	ADJOINING LOT(S)
1-2	SW	LOT 61, BLOCK 1, PCS-04-028598
2-3	NW	LOT 60, BLOCK 1, PCS-04-028598
3-4	NE	ROAD LOT 7, PCS-04-028598
4-1	SE	LOT 58, BLOCK 1, PCS-04-024108

**AREA: SIXTY-FIVE SQUARE METERS (65), MORE OR LESS**

All sealed bids must be submitted to the undersigned on the above stated time and date.

In the event the public auction should not take place on the said date and time, it shall be held on **April 15, 2021** without further notice.

Prospective bidders/buyers are hereby enjoined to investigate for themselves the title to the said property and ascertain thereon, if any there be.

Trece Martires City, January 19, 2021.

(Sgd.) **RICARDO A. TOLEDO**  
Sheriff IV

Copy Furnished:

BDO UNIBANK, INC.  
RISK MANAGEMENT GROUP-REMEDIAL MANAGEMENT UNIT  
11<sup>th</sup> Floor, BDO South Tower, BDO Corporate Tower,  
7899 Makati Avenue, Makati City 0726

**SHEILA ELIGOVO TEJERESAS**  
1.) No. 521-2d Boro Serrano Ave., San Roque, Quezon City  
2.) Blk. 1 Lot 59, Kensington 17, Navarro, Gen. Trías, Cavite

**WARNING: IT IS ABSOLUTELY PROHIBITED TO REMOVE, DEFACE, OR DESTROY THIS NOTICE OF EXTRA-JUDICIAL SALE ON OR BEFORE THE DATE OF SALE**

Publication: **DIYARYO KABITENYO**  
Dates: January 25, February 1 & 8, 2021.



Republic of the Philippines  
MUNICIPAL CIVIL REGISTRY OFFICE  
MUNICIPALITY OF TANZA  
Province of Cavite



**NOTICE TO THE PUBLIC**

21 January 2021

CFN-0001-2021  
CCE-0001-2021 RA 18172

In compliance with the publication requirement and pursuant to OCRG Memorandum Circular No. 2013-1 (Guidelines to the Implementation of the Administrative Order No. 1, Series of 2012 (RR at R.A. 10172), Notice is hereby served to the public that **CYNTHIA PALINO SAN DIEGO** has filed with this Office a petition for **CHANGE OF FIRST NAME** from "María Cynthia Constantia" to "Cynthia" and **CORRECTION OF CLERICAL ERROR in CHILD'S DATE OF BIRTH** from "29 JANUARY 1954" to "28 JANUARY 1954" in the Certificate of Live Birth of Ms. Cynthia Constantia M. Palino who was born on 29 January 1954 at Tanza, Cavite and whose parents were Romeo F. Palino & Juliana Marcano.

Any person adversely affected by said petition may file his/her written opposition with this Office not later than **February 08, 2021**.

(Sgd.) **MA. THERESA J. CESA**  
Municipal Civil Registrar

DIYARYO KABITENYO - January 29 and February 1, 2021

## Simple, cheap test can help save lives from colorectal cancer, study shows

New research has demonstrated that a simple, cheap test can help identify who at risk of developing colorectal cancer, aiding early diagnosis and potentially saving lives.

Led by the University of Exeter, and supported by the Peninsula and the Somerset, Wiltshire, Avon, and

Gloucestershire Cancer Alliances, and by the Cancer Research UK CanTest Collaborative, a new study published January 19, 2021 in the British Journal of Cancer examined data from nearly 4,000 patients aged 50 and over. The study involved all healthcare providers in the South West of England taking a new approach. Over six months, they provided the faecal immunochemical test (FIT), which costs around £4 and can pick up traces of hidden blood in faeces. The test was given to anyone with low-risk symptoms of colorectal cancer – that is, symptoms that can be caused by bowel cancer but are also very often caused by other things – such as stomach ache, unexplained weight loss, or anaemia. Prior to this, there was no easy to do test available for people with low risk symptoms of colorectal cancer.

From June to December 2018, 3,890 patients received the FIT. Of those, 618 tested positive for blood in their faeces, 43 of whom had received a diagnosis of colorectal cancer within 12 months. In the group that tested negative, only eight were diagnosed with colorectal cancer a year later.

# Research establishes antibiotic potential for cannabis molecule

Synthetic cannabidiol, better known as CBD, has been shown for the first time to kill the bacteria responsible for gonorrhoea, meningitis and legionnaires disease.

The research collaboration between The University of Queensland and Botanix Pharmaceuticals Limited could lead to the first new class of antibiotics for resistant bacteria in 60 years.

The UQ Institute for Molecular Bioscience's Associate Professor Mark Blaskovich said CBD — the main nonpsychoactive component of cannabis — can penetrate and kill a wide range of bacteria including *Neisseria gonorrhoeae*, which causes gonorrhoea.

This is the first

time CBD has been shown to kill some types of Gram-negative bacteria. These bacteria have an extra outer membrane, an additional line of defence that makes it harder

for antibiotics to penetrate," Dr Blaskovich said.

In Australia, gonorrhoea is the second most common sexually-transmitted infection and there is no longer a single reliable antibiotic to treat it because the bacteria is particularly good at developing resistance.

The study also showed that CBD was widely effective against a much larger number of Gram-positive bacteria than previously known, including anti-

biotic-resistant patho-

gens such as MRSA (methicillin-resistant *Staphylococcus aureus*) or 'golden staph'.

Dr Blaskovich said cannabidiol was particularly good at breaking down biofilms — the slimy build-up of bacteria, such as dental plaque on the surface of teeth — which help bacteria such as MRSA survive antibiotic treatments.

Dr Blaskovich's team at the Centre for Superbug Solutions mimicked a two-week patient treatment in laboratory models to see how fast the bacteria mutated to try to outwit CBD's killing power.

"Cannabidiol showed a low tendency to cause resistance in bacteria even when we sped up potential de-

velopment by increasing concentrations of the antibiotic during treatment."

"We think that cannabidiol kills bacteria by bursting their outer cell membranes, but we don't know yet exactly how it does that, and need to do further research.

The research team also discovered that chemical analogs — created by slightly changing CBD's molecular structure — were also active against bacteria.

This is particularly exciting because there have been no new molecular classes of antibiotics for Gram-negative infections discovered and approved since the 1960s, and we can now consider de-

velopment by increasing concentrations of the antibiotic during treatment."

Vince Ippolito, the President and Executive Chairman of Botanix, said the research showed vast potential for the development of effective treatments to fight the growing global threat of antibiotic resistance.

"Congratulations to Dr Blaskovich and his team for producing this significant body of research — the published data clearly establishes the potential of synthetic cannabinoids as antimicrobials," Mr Ippolito said.

"Our Company is now primed to commercialise viable antimicrobial treatments which we hope will reach more patients in the near future. This is a major breakthrough

CBD with improved properties."

Dr Blaskovich said collaborating with Botanix has sped up the research, with Botanix contributing formulation expertise that has led to the discovery that how cannabidiol is delivered makes a huge difference in its effectiveness at killing bacteria.

The collaboration has enabled Botanix to progress a topical CBD formulation into clinical trials for decolonisation of MRSA before surgery.

"Those Phase 2a clinical results are expected early this year and we hope that this will pave the way forward for treatments for gonorrhoea, meningitis and legionnaires disease."



# Eye tests predict Parkinson's-linked cognitive decline 18 months ahead

Simple vision tests can predict which people with Parkinson's disease will develop cognitive impairment and possible dementia 18 months later, according to a new study by UCL researchers.

The study, published in *Movement Disorders*, adds to evidence that vision changes precede the cognitive decline that occurs in many, but not all, people with Parkinson's.

In another new study published January 19, 2021 in *Communications Biology*, the same research team found that structural and functional connections of brain regions become decoupled throughout the entire brain in people with Parkinson's disease, particularly among

people with vision problems. The two studies together show how losses and changes to the brain's wiring underlie the cognitive impairment experienced by many people with Parkinson's disease.

Lead author Dr Angeliki Zarkali (Dementia Research Centre, UCL Queen Square Institute of Neurology) said: "We have found that people with Parkinson's disease who have visual problems are more likely to get dementia, and that appears to be explained by underlying changes to their brain wiring.

"Vision tests might provide us with a window of opportunity to predict Parkinson's dementia before it begins, which may help us find

ways to stop the cognitive decline before it's too late."

For the *Movement Disorders* paper, published earlier this month, the researchers studied 77 people with Parkinson's disease and found that simple vision tests predicted who would go on to get dementia after a year and a half.

Dementia is a common, debilitating aspect of Parkinson's disease, estimated to affect roughly 50% of people within 10 years of a Parkinson's diagnosis.

These longitudinal findings add weight to previous studies that were done at one time point, which had suggested that performance in vision tests, involving commonly used eye charts and skewed images of cats and dogs,

was linked to the risk of cognitive decline.

The new study also found that those who went on to develop Parkinson's dementia had losses in the wiring of the brain, including in areas relating to vision and memory. The researchers used recently developed methods to analyse finely detailed MRI scans, enabling them to pick up the damage to the brain's white matter.

The researchers identified white matter damage to some of the long-distance wiring connecting the front and back of the brain, which helps the brain to function as a cohesive whole network.

The *Communications Biology* study involved 88 people with Parkinson's disease (33 of whom had visual

dysfunction and were thus judged to have a high-risk of dementia) and 30 healthy adults as a control group, whose brains were imaged using MRI scans.

In the healthy brain, there is a correlation between how strong the structural (physical) connections between two regions are, and how much those two regions are connected functionally. That coupling is not uniform across the brain, as there is some degree of decoupling in the healthy brain, particularly in areas involved in higher-order processing, which might provide the flexibility to enable abstract reasoning. Too much decoupling appears to be linked to poor outcomes.

The researchers found that people with Parkinson's disease exhibited a higher degree of decoupling across the whole brain. Areas at the back of the brain, and less specialised areas, had the most decoupling in Parkinson's patients.

The researchers

## New approach emerges to better classify, treat brain tumors

A look at RNA tells us what our genes are telling our cells to do, and scientists say looking directly at the RNA of brain tumor cells appears to provide objective, efficient evidence to better classify a tumor and the most effective treatments.

Gliomas are the most common brain tumor type in adults, they have a wide range of possible outcomes and three subtypes, from the generally more treatable astrocytomas and oligodendrogliomas to the typically

more lethal glioblastomas. Medical College of Georgia scientists report in the journal *Scientific Reports* that their method, which produces what is termed a transcriptomic profile of the tumor is particularly adept at recognizing some of the most serious of these tumors, says Paul M.H. Tran, MD/PhD student.

Gliomas are currently classified through histology, primarily the shape, or morphology, pathologists see when they look at the cancerous cells under a microscope, as well as identification of known cancer-causing gene mutations present.

"We are adding a third method," says Dr. Jin-Xiong She, director of the MCG Center for Biotechnology and Genomic Medicine, Georgia Research Alliance Eminent Scholar in Genomic Medicine and the study's corresponding author. Tran, who is doing his PhD work in She's lab, is first author.

## Study identifies a nonhuman primate model that mimics severe COVID-19 similar to humans

Aged, wild-caught African green monkeys exposed to the SARS-CoV-2 virus developed acute respiratory distress syndrome (ARDS) with clinical symptoms similar to those observed in the most serious human cases of COVID-19, report researchers in the *American Journal of Pathology*, published by Elsevier. This is the first study to show that African green monkeys can develop severe clinical disease after SARS-CoV-2 infection, suggesting that they may be useful models for the study of COVID-19 in humans.

"Animal models greatly enhance our understanding of diseases. The lack of an animal model for severe manifestations of COVID-19 has hampered our understand-

ing of this form of the disease," explained lead investigator Robert V. Blair, DVM, PhD, DipACVP, Tulane National Primate Research Center, Covington, LA, USA. "If aged green monkeys prove to be a consistent model of severe COVID-19, studying the disease pathobiology in them would improve our understanding of the disease and allow testing treatment options."

The researchers exposed four aged rhesus macaques and four aged African green monkeys to SARS-CoV-2. Older animals (13-16 years of age) were specifically chosen to see if they would develop the severe form of the disease that is observed more frequently in elderly individuals. All of the monkeys developed a spectrum of

disease from mild to severe COVID-19. A day after routine screening found no remarkable symptoms, two of the African green monkeys developed rapid breathing that quickly progressed to severe respiratory distress. Radiographic studies found the two African green monkeys had widespread opacities in the lungs, in stark contrast to images taken the day before, highlighting the rapid development of the disease. Such opacities are a hallmark of ARDS in humans.

The African green monkeys that progressed to severe disease had notable increases in plasma cytokines that are compatible with cytokine storm, which is thought to underlie the development of ARDS in some patients.