

The Lord is like a strong tower, where the righteous can go and be safe.
Proverbs 18:19

DIYARYO
KABITENYO
Nagmamalasakit sa lalawigan

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Be alert, stand firm in the faith, be brave, be strong.
1 Corinthians 16:13

Cavite mayors back localized granular lockdowns – Concepcion

A number of Cavite mayors are increasingly using a localized and granular approach to lockdowns in their respective localities in tandem with targeted testing to help contain COVID-19 infection in local clusters.

City Mayors Lati Mercado-Berville of Bacoor, Antonio Ferrer of General Trias, Emmanuel Malinao of Imus, and representatives from other municipalities shared this in a virtual press conference.

"Targeting non-essential activities is very important for us because that is the only weapon we have to ensure mobility by ensuring visibility, thus

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Cavite cops receive 6 awards in Calabarzon edition of Police Service Anniversary

The Cavite Provincial Office (COPPO) received 6 awards during the regional celebration of the 119th Police Service Anniversary last Aug. 8 at Camp Victoria in Calamba City.

Headed by the Police Regional Office 4 (Calabarzon), this year's theme "Towards a Pandemic Resilient PNP: Adopting Progressive Protocols in the New Normal."

Prior to the regional awards last Aug. 8, the Philippine National Police Headquarters in Camp Guano, Quezon City, announced that PNP Calabarzon was the Best Police Regional Office for 2019.

Brigadier General Vicente D. Duman Jr. is the PNP Calabarzon regional director. Duman himself presided over the award Calabarzon ceremonies.

Special Unit Award Accomplishment on Anti-Illegal Drug Operations – PPO Category.

Other Justice PCCO awards that went to Cavite PPO were:

The regional

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DIYARYO KABITENYO

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(CAVITE... from page 1)

know what areas or barangays to lockdown and that's very important. I believe our mayors are the most capable people in determining where to lockdown."

"Karamihan po ng said Presidential Adviser for Entrepreneurship and Go Negosyo founder Joey Concepcion.

He also underscored the challenges in trying to achieve a balance between public health and the economy.

"What is important is we have to save both. It is not a choice of either but it is saving lives, jobs, and livelihoods. Saving all three is the best we can. My focus is on a granular lockdown and avoid (avoid) locking down which disrupts the

economy much more. Massive targeted testing plus a granular approach is the best way forward." Concepcion stressed.

"Karamihan po ng mga cases ay empleyado mula sa NCR (National Capital Region). Nakakalungkot na may transmission kami lokal sa to-lockdown ang Zapote 1 Barangay Hall of Imus at temporarily close ang ating public market para mapigil ang lokal transmission... We agree on the usage of both (RTKs and RT-PCR). We will continue to use both just to monitor and help us isolate, treat, and do minimum lockdowns," said Mayor Bayilla.

ARX Medical Team

(CAVITE COPS... from page 1)

for Administration Major Mark Jason Gaddala, former Chief of Police of Indang Municipal Police Station.

•Special Awards for Anti-Ilegal Drugs Operations Lieutenant Colonel Vicente Cabatangan, former Chief of Police of Bacoor City Police Station.

•Unit Awards Best City Police Station: Dasmariñas City Police Station.

•Special Award (Station Level) Best Crime Solution Efficiency and Crime Clearance Category: Cavite City Police Station.

•Special Award

(Station Level) Best Crime Solution Efficiency and Crime Clearance Category: Cavite City Police Station.

The PNP celebrates Police Service Anniversary on the 8th of August of every year to commemorate the

founding anniversaries of its fire-runner organizations - the Philippine Constabulary, established on August 8, 1901 and the Integrated National Police established August 8, 1975.

Colonel Marlon Saona, Cavite Provincial Director, commended his men who won awards.

Lead Dr. Mingona Padilla emphasized the importance of quality, high-specificity rapid test kits (RTKs) in creating a level of visibility against the virus.

She continued that RTKs should be used in compliance with strict medical protocols along with knowledge of its limitations.

"As medical head, I have access to a lot of data from companies. As long as the company structured the medical protocols, RTKs have helped them open and stay open. Like any weapon, the key is to use it properly," she said.

"At the beginning, there was nothing so we used RTKs but (they should be used) always in combination with RT-PCR when necessary and always following DOH guidelines. (Our knowledge about the

virus has evolved and is continuing to evolve.

What we know today is different from what we know tomorrow. That's the nature of medicine. There's no absolute. We started with RTKs, we have RT-PCR, now we're going to pooled PCR then perhaps there's also rapid antigen testing. We have to keep our minds open and make the most of what we have - technology-wise."

The local chief executives echoed the statement, affirming the validity of RTKs in supporting their surveillance efforts, augmenting limited testing capacity, and guiding the implementation of localized lockdown, when necessary.

Mayor Ferrer expressed gratitude for the RTKs donated by Project ARX which they used to promptly test their medical team

lines and barangay personnel.

"By making these (rapid) test kits available, we were able to address the need and obtain information that can guide us to our way forward. Testing helps us to identify probable areas that we need to strengthen protection, especially for our people and where and how to rally our resources to respond appropriately. Rapid testing keeps the morale of your workers up," he said.

"We welcome pooled testing schemes as it becomes available. For pooled testing, mas mapapabili at any given time kasi mas madali yung ma-put. Kung ma-detekt man sa bang pool, okay lang i-test i-ha individually. Kung walang positive, it saves time and mas economical."

"Nakakalungkot na 80-85% of our cases

actually come from (individuals that work in) Metro Manila but have to come back (to their respective provinces) for isolation. Mayraong situations where we have had local transmission pero we're trying to control it. In fact, naghakaroon sa kami ng mga localized lockdown in the past month," said Red Alonzo, tourism representative who was speaking on behalf of the Dasmariñas city mayor.

Mayor Malibis said that they used nearly all of the 3,500 RTKs turned over by Project ARX to screen workers at two public health markets. Like his fellow mayors, Malibis highlighted the importance of RTKs due to its affordability and ability to offer a good insight into infection levels as long as confirmatory tests were done through swab tests.



REPUBLIC OF THE PHILIPPINES
FOURTH JUDICIAL REGION
REGIONAL TRIAL COURT
OFFICE OF THE CLERK OF COURT
TRINIDAD MARIKINA CITY

CHINA BANK SAVINGS, INC.,
Mortgagee

VS

Foreclosure Case No. F-020-20

MRS. CHARLYN KAE C. PENILLA AND
FERDINAND V. PENILLA,
Mortgagors

NOTICE OF EXTRA-JUDICIAL SALE

Upon Extra-Judicial Petition for Sale under Art. 2225, as amended by Art. 4118, filed by Mortgagee, CHINA BANK SAVINGS, INC., with business address at 314 San. Gil J. Tirona Avenue, Marikina City against the Mortgagors, MRS. CHARLYN KAE C. PENILLA AND FERDINAND V. PENILLA, with residence and postal address at 9015 Daga St., Daga Subd., Bigy Odang-Galang, Linares City to satisfy the obligation evidenced as of January 31, 2020 amounting to TWO MILLION NINE HUNDRED SEVENTY NINE THOUSAND ONE HUNDRED SEVENTY SEVEN PESOS and 54/100 (P2,979,175.00, Philippine Currency, including interest, penalties, and other charges as of said date but exclusive of all other expenses incidental to this foreclosure and sale, the undersigned Sheriff will sell at public auction on **October 1, 2020** at 10:00 o'clock in the morning at the main entrance of the Government Center Bldg., located at the Provincial Capitol Compound, Trinidad Marikina 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. 075-2008084

IT IS HEREBY CERTIFIED that certain land situated in BRGY. DE FEJOSO, MUN. OF GEN. TRIAS, PROVINCE OF CAVITE, ISLAND OF LUZON bounded and described as follows:
A PARCEL OF LAND LOT 28, BLK. 60 OF THE CONS.-SUBD. PLAN PCS-0481189, BEING A PORTION OF THE CONS. OF LOTS 2660-0-1 TO 8, ALL OF (LRC) PSD-221734, LOT 2660-0-2, (LRC) PSD-101752, LOTS 2660-0-1, 8 & 8, ALL OF PSD-33619, L.R.C. REC. NO. 3 SITUATED IN THE BRGY. OF DE FEJOSO MUN. OF GEN. TRIAS, PROVINCE OF CAVITE, IS OF LUZON, BOUNDED ON THE NE, ALONG LINE 1-2 BY LOT 32, BLK. 60, ON THE SE, ALONG LINE 2-3 BY ROAD LOT 34, 36, 38 M. WIDE; ON THE SW, ALONG LINE 3-4 BY LOT 28, ON THE NW, ALONG LINE 4-1 BY LOT 27, BOTH OF BLK. 60, ALL OF THE CONS.-SUBD. PLAN, BEGINNING AT A PT. MARKED "T" ON PLAN XXX CONTAINING AN AREA OF FORTY ONE SQ. METERS AND FORTY SEVEN SQ. DECMETERS (41.47).

SUB. PLAN BEGINNING AT A PT. MARKED "T" ON PLAN XXX CONTAINING AN AREA OF FORTY ONE SQ. METERS AND FORTY SEVEN SQ. DECMETERS (41.47).

TRANSFER CERTIFICATE OF TITLE NO. 075-2008084

IT IS HEREBY CERTIFIED that certain land situated in BRGY. DE FEJOSO, MUN. OF GEN. TRIAS, PROVINCE OF CAVITE, ISLAND OF LUZON, bounded and described as follows:

A PARCEL OF LAND LOT 30, BLK. 60 OF THE CONS.-SUBD. PLAN PCS-0481189, BEING A PORTION OF THE CONS. OF LOTS 2660-0-1 TO 8, ALL OF (LRC) PSD-221734, LOT 2660-0-2, (LRC) PSD-101752, LOTS 2660-0-1, 8 & 8, ALL OF PSD-33619, L.R.C. REC. NO. 3 SITUATED IN THE BRGY. OF DE FEJOSO MUN. OF GEN. TRIAS, PROVINCE OF CAVITE, IS OF LUZON, BOUNDED ON THE NE, ALONG LINE 1-2 BY LOT 32, BLK. 60, ON THE SE, ALONG LINE 2-3 BY ROAD LOT 34, 36, 38 M. WIDE; ON THE SW, ALONG LINE 3-4 BY LOT 28, ON THE NW, ALONG LINE 4-1 BY LOT 27, BOTH OF BLK. 60, ALL OF THE CONS.-SUBD. PLAN, BEGINNING AT A PT. MARKED "T" ON PLAN XXX CONTAINING AN AREA OF FORTY ONE SQ. METERS AND FORTY SEVEN SQ. DECMETERS (41.47).

All said land must be returned to the registrant 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 **October 8, 2020** without further notice.

Prospective bidders/buyers are hereby required to investigate by themselves the title to the said property and encumbrances thereon, if any there be.

Trinidad Marikina City, **July 24, 2020.**

(Sgd.) RICARDO A. TOLEDO
Sheriff IV

Copy Forfeited:

CHINA BANK SAVINGS, INC.,
314 San. Gil J. Tirona Avenue, Marikina City

MRS. CHARLYN KAE C. PENILLA AND
FERDINAND V. PENILLA,
9015 Daga St., Daga Subd.,
Bigy Odang-Galang, Linares City

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

Foreclosure: DIYARYO KABITENYO
Date: August 1, 19 & 17, 2020

Artificial intelligence recognizes deteriorating photoreceptors

A software-based therapy, which provides on artificial intelligence (AI), which was developed by researchers at the Eye Clinic of the University of Utah, enables the precise assessment of the progression of geographic atrophy (GA), a disease of the light-sensitive retina caused by age-related macular degeneration (AMD). This innovative approach permits the fully automated measurement of the main atrophic lesions using data from optical coherence tomography.

In addition, the research team can precisely determine the integrity of light-sensitive cells of the entire central retina and also detect progressive degenerative changes of the so-called photoreceptors beyond the main lesions. The findings will be used to assess the effectiveness of new innovative therapeutic approaches. The study has now been published in the journal "JAMA Ophthalmology."

Fundamentally new approach to ultrasound imaging

North Carolina State University researchers have demonstrated a new technique for creating ultrasound images. The new approach is substantially simpler than existing techniques and could significantly drive down costs.

The new approach converts them into an electrical signal, which is then sent to a computer that processes the signal and converts it into an image.

Specifically, the researchers have developed a receiver that effectively simulates the work of a Duncanson Distinguished Professor of Mechanical and

REPUBLIC OF THE PHILIPPINES
SOUTHERN JUDICIAL REGION
REGIONAL TRIAL COURT
OFFICE OF THE CLERK OF COURT
TRINIDAD MARIKINA CITY

HOME DEVELOPMENT MUTUAL FUND
Mortgages

Enrollment Case No. T-000-20

MS. ALMA L. INDIANGAN
Mortgagee

NOTICE OF EXTRA-JUDICIAL SALE

Upon Extra-Judicial Petition for Sale under Act 7111, as amended by Act 4174, filed by Mortgagee, **HOME DEVELOPMENT MUTUAL FUND**, with business address at 127 Floor, 122-P Business Solutions Center, No. 409 Shaw Boulevard, Mandaluyong City, against the Mortgagee's, **MS. ALMA L. INDIANGAN**, with residence and postal address LOT 26 BLK 2 PH 2 TIERRA NEVADA MOUNT SAN FRANCISCO GEN TRIAS CAVITE, to satisfy the mortgage indebtedness as of February 16, 2020 amount to **FOUR HUNDRED EIGHTY NINE THOUSAND THIRTY PUNOS AND 15/100 (P809,839.15)**, Philippine Currency, including interest, penalties, and other charges as of said date but exclusive of all the other expenses incident to the foreclosure and sale, the undersigned himself will sell at public auction on **October 1, 2020 at 10:00 o'clock in the morning** at the main conference of the Government Center Bldg., located at the Provincial Capitol Compound, Santa Mariona City, to the highest bidder the CASH and a Mortgage Company, the following described property with all the appurtenances thereto, to-wit:

TRANSFER CERTIFICATE OF TITLE
No. 87-2008647

A PARCEL OF LAND LOT 26 BLK 2 OF THE CONSOLIDATED PLAN PCS-0442401 BEING A PORTION OF THE CORP. ALL OF THE LOTS OF BLOCK 40 TO 140, 800 LOTS 4-A, 5-A, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

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Petitioner: **DIARYO KABITENYO**
 Date: August 1, 2020

antibodies specific to infection (neutralize viral envelope antigens, referred as HBsAg, from blood memory B cells isolated from HBV vaccinees and natural controllers.

Hepatitis B is one of the major human diseases; it is estimated that 2 billion people have been infected with the virus and more than 250 million are chronic carriers capable of transmitting the virus over many years. Chronic carriers are exposed to a high risk of death from liver cirrhosis or liver cancer, diseases that claim around a million lives every year.

There are no drugs available to treat acute hepatitis and improve the chances of recovery. But some rare patients, known as natural controllers, undergo seroconversion – they develop antibodies against the virus that can be detected in the blood, conferring protection against the disease steadily to vaccination. In response to HBV infection, specific antibodies produced by immune cells called B lymphocytes recognize HBsAg, some of which being able to block viral

tion) and propagation by destroying infected liver cells (hepatocytes). Thus, such antibodies appear to play a crucial role in eliminating HIV and protecting against infection. To investigate the antibody response involved in the protection against HBV infection and analyse in details the properties of the antibodies directed against the virus, the laboratory of Humoral Immunology (Institut Pasteur / INSERM U1222), in collaboration with the Roche Immunization Center in Switzerland, led by James D.J. Smit and Pierre Chermann (Institut Pasteur), and the teams led by Germaine Pol (Cochin Hospital) and Camille Sureau (French Blood Transfusion Institute (INTS)), produced and characterized about a hundred human monoclonal antibodies specific to the HBV surface antigens (HBsAg) expressed by memory B cells isolated from the blood of vaccinees and individuals cured of chronic infection (natural controllers).

Hepatitis B: Natural controllers shed light on immunity mechanisms

Infections caused by the hepatitis B virus (HBV) represent a major public health problem. Despite the availability of effective preventive vaccines, more than 250 million individuals worldwide are chronically infected

according to WHO estimates. HBV infection is associated with cirrhosis, liver failure and hepatocellular carcinoma, responsible for approximately a million deaths every year. To date there is no specific treatment to completely eliminate

the virus and provide a cure for chronic HBV infection. Interestingly, however, about 1% of individuals with chronic HBV infection, known as natural controllers, are capable of recovering spontaneously. To improve our understanding of the antibody response conferring protection against HBV infection, scientists from the Institut Pasteur and Inserm, in collaboration with the Roche Immunization Center in Switzerland, produced and characterized human monoclonal

antibodies specific to infection (neutralize viral envelope antigens, referred as HBsAg, from blood memory B cells isolated from HBV vaccinees and natural controllers. Hepatitis B is one of the major human diseases; it is estimated that 2 billion people have been infected with the virus and more than 250 million are chronic carriers capable of transmitting the virus over many years. Chronic carriers are exposed to a high risk of death from liver cirrhosis or liver cancer, diseases that claim around a million lives every year. There are no drugs available to treat acute hepatitis and improve the chances of recovery. But some rare patients, known as natural controllers, undergo seroconversion – they develop antibodies against the virus that can be detected in the blood, conferring protection against the disease steadily to vaccination. In response to HBV infection, specific antibodies produced by immune cells called B lymphocytes recognize HBsAg, some of which being able to block viral

DECLARATION OF HEREDITY
(Extra-Judicial Settlement of Estate)

NOTICE is hereby given that the estate of the late JOSE E. OCAMPO who died testate on April 23, 2018, a resident of Pataguan, Bataan, Cavite at the time of his death, consisting of the following conjugal properties:

	Tender Certificate of Title No.	Conjugal Share of Gerardo M. Ocampo	Conjugal Share of Jose E. Ocampo
a.	T-792732	50%	50%
b.	T-792802	50%	50%
c.	T-792731	50%	50%
d.	T-792779	50%	50%
e.	T-792771	50%	50%
f.	T-792770	50%	50%
g.	T-792838	50%	50%
h.	T-1055053	50%	50%
i.	T-071165	50%	50%
j.	T-792801	50%	50%
k.	T-115381	50%	50%
l.	T-173523	50%	50%
m.	T-181934	50%	50%
n.	017-301094700	50%	50%
o.	T-792807	50%	50%
p.	T-792797	50%	50%
q.	T-792795	50%	50%
r.	T-792796	50%	50%
s.	T-475444	50%	50%
t.	T-48233	50%	50%
u.	T-792803	50%	50%
v.	T-792844	50%	50%
w.	T-980141	50%	50%

are here adjusted and extra-judicially settled by and among his heirs;

That after due heed the properties shall have the following ownership interest:
 GERARDO M. OCAMPO 50% conjugal share
 GERARDINE O. MACABONCA 12.5% inheritance
 EDGAR M. OCAMPO 12.5% inheritance
 JACKELYN O. ESCUETA 12.5% inheritance
 JEREMY M. OCAMPO 12.5% inheritance

That by way of Special Power of Attorney, they do hereby appoint, name and constitute EDGAR M. OCAMPO to be their true and lawful attorney-in-fact to do and perform all or any of the following acts and deed to wit: to mortgage the above-listed properties and to sign, execute and follow contracts, documents or agreements and other writings of whatever kind or nature upon such terms and conditions as may be to their attorney-in-fact and to accept on their behalf any money, proceeds or payments resulting therefrom; and in general to do all other acts, deeds, matters, and things whatsoever relating to their interests over the estate of JOSE E. OCAMPO, so fully and effectual to all intents and purposes as they could lawfully do in their own proper person if personally present.

Giving and granting unto their said attorney-in-fact full power and authority to do and to perform all and every act requisite or necessary to carry out effect the foregoing authorizations, as fully to all intents and purposes as they might or could lawfully do if personally present, with full power of substitution and revocation, and hereby certifying and confirming all that their said attorney-in-fact substitutes shall lawfully do or cause to be done by virtue hereof.

That this Special Power of Attorney is substituted for their own benefit and shall exist, be valid and effective even after the death of any and all of the principals.

In August 3, 2020 in Manila City, Philippines before Notary Public Arly Andia Cruz L. Co and entered in his Notarial Register in Doc. No. 284, Page No. 11, Book No. 4, Series of 2020.

(Sgd.) Gerardo M. Ocampo and Gerardine O. Macabonca in her own behalf and as representative of Jose M. Ocampo, Jackelyn O. Escute and Edgar M. Ocampo
 Publication: DRABO KABTENYO
 Date: August 17, 20 & 21, 2020

Adding a meter between meals boosts vegetarian appeal

Meat-heavy diets not only risk our health but also that of the planet. As livestock farming on a massive scale destroys habitats and generates greenhouse gases,

105,143 meal selections over a two-year period, alternating the placement of meat and veg dishes every month.

Conservationists at the University of Cambridge are investigating ways of "nudging" people towards eating more plants and less meat, to help curb the environmental damage caused by excessive consumption of animal products.

The researchers experimented on customers in the cafeterias of two Cambridge colleges to find out whether the position of vegetarian options influences the uptake of plant-based dining.

They collected and analysed data from

shot up by a quarter (25.2%) in the week-long analysis, and by almost 40% (39.6) in the monthly comparison.

The difference almost a metre of added distance between the

vegetarian and meat options, with an 85cm gap in the first college compared to a 181cm gap in the second. The findings are published August 13, 2020 in the journal *Nature Food*.

"Reducing meat and dairy consumption is one of the simplest and most impactful choices we can make to protect the climate, environment and other species," said study lead author Emma Garrett, a conservationist from Cambridge's Department of Zoology.

Busting Up the Infection Cycle of Hepatitis B

Researchers at the University of Delaware, using supercomputing resources and collaborating with scientists at Indiana University, have gained new understanding of the virus that causes hepatitis B and the 'spiky ball' that encloses the virus's genetic blueprint.

The research, which has been published online, ahead of print, by the American Chemical Association journal ACS Chemical Biology, provides insights into how the capsid—a protein shell that protects the blueprint and also drives the delivery of it to infect a host cell—assembles itself.

Computer simulations performed by the UD scientists investigated the effects of a mutation that impairs the assembly process. Together with collabora-

tors, the researchers revealed that the region of the protein that contains the mutation, the spike, can communicate with the region of the protein that links with other subunits to assemble the capsid. They found evidence that a change in the shape of the capsid protein switches it into an "on" state for assembly.

Scientists believe that the capsid is an important target in developing drugs to treat hepatitis B, a life-threatening and incurable infection that affects more than 250 million people worldwide.

"The capsid looks like a spiky ball, with 120 protein dimers that assemble to form it, each dimer containing a spike," said Juli A. Hadden-Perilla, assistant professor in UD's Department of Chem-

istry and Biochemistry and a co-author of the new paper. "The capsid is key to the virus infection cycle. If we could disrupt the assembly process, the virus wouldn't be able to produce infectious copies of itself."

The Indiana University researchers had been studying the dimers, which are two-part, T-shaped molecular structures, and investigating whether a mutation could activate or deactivate a switch to turn on the capsid's assembly mechanism. They worked with Hadden-Perilla's group, which ran computer simulations to explain how changes in the protein structures induced by the mutation affected the capsid's ability to assemble.

"What we learned is that this mutation disrupts the structure

of the spike at the top of the dimer," Hadden-Perilla said. "This mutation slows down assembly, which actually involves a region of the protein that is far away from the spike. It's clear that these two regions are connected. A change in the shape of the protein, particularly at the spike, may actually activate or deactivate assembly."

Her team did its work using the National Science Foundation-supported Blue Waters supercomputer at the University of Illinois at Urbana-Champaign, the largest supercomputer on any university campus in the world, to perform what are known as all-atom molecular dynamics simulations.

Molecular dynamics simulations allow researchers to study the way molecules move in

order to learn how they carry out their functions in nature. Computer simulations are the only method that can reveal the motion of molecular systems down to the atomic level and are sometimes referred to as the "computational microscope."

The paper, titled "The integrity of the intradimer interface of the Hepatitis B Virus capsid protein dimer regulates capsid self-assembly," can be viewed on the journal's website.

From Colombia to UD for doctoral student Carolina Pérez Segura, a co-author of the paper, working with data from the supercomputer simulations was the kind of research experience that first brought her to the University of Delaware and then inspired her

to stay. She examined numerous simulations and vast amounts of data to investigate the effect of the mutation and "made some important discoveries," Hadden-Perilla said. "We threw her into the deep end in my brand-new research group (last summer), and she did a great job."

Pérez Segura came to UD as a participant in the University's Latin American Summer Research Program. A graduate of the Universidad Nacional de Colombia (National University of Colombia), the program marked her first time leaving Colombia and, indeed, her first time traveling by plane. She planned to conduct research under Hadden-Perilla's mentorship for a couple of months and then return home.

Loss of a specific enzyme boosts fat metabolism and exercise endurance in mice

Sugars and fats hydroxylase 3 (PHD3) are the primary fuel sources for most cells. PHD3 is the energy source of choice, but when nutrients are scarce, such as during starvation or extreme exertion, cells will switch to breaking down fats instead.

The mechanisms by which cells receive their metabolism in response to changes in resource availability are not yet fully understood, but new research reveals a surprising consequence when one such mechanism is turned off: an increased capacity for endurance exercise.

In a study published in the journal *Cell Metabolism*, Harvard Medical School researchers identified a critical role of the enzyme, phospho-

phatase 3 (PHD3), in sensing nutrient availability and regulating the ability of muscle cells to break down fats. When nutrients are abundant, PHD3 acts as a brake that prevents unnecessary fat metabolism. This brake is released when fuel is low and more energy is needed, such as during exercise.

Remarkably, blocking PHD3 production in mice leads to dramatic improvements in exercise measures of fitness, the research showed. Compared with their normal littermates, mice lacking the PHD3 enzyme ran 40 percent longer and 50 percent farther on treadmills and had higher VO2 max, a marker of aerobic endurance that measures the maximum oxygen uptake during

exercise. The findings shed light on a key mechanism for how cells metabolize fuels and offer clues toward a better understanding of muscle function and fitness, the authors said.

"Our results suggest that PHD3 inhibition in whole body or skeletal muscle is beneficial for fitness in terms of endurance, exercise capacity, running time and running distance," said senior study author Marcia Haigis, professor of cell biology in the Biotech Institute at HMS. "Understanding this pathway and how our cells metabolize energy and fuels potentially has broad applications in biology, ranging from cancer control to exercise physiology."

However, further studies are needed to elucidate whether this pathway can be manipulated in humans to improve muscle function in disease settings, the authors said.

Haigis and colleagues set out to investigate the function of PHD3, an enzyme that they had found to play a role regulating fat metabolism in certain cancers in previous studies. Their work showed that, under normal conditions, PHD3 chemically modifies another enzyme, ACC2, which in turn prevents fatty acids from entering mitochondria to be broken down for energy.

These observations were confirmed in live mice that were fasted to induce energy-deficient conditions. In fasted mice, the PHD3-dependent chemical modification to ACC2 was significantly reduced but in skeletal and heart muscle, compared to fat mice. By contrast, exercise capacity"

depending on energy availability increased.

In isolated mouse cells grown in sugar-rich conditions, the team found that PHD3 quiesces when PHD3 activity was inhibited, ACC2 to inhibit fat metabolism. Under low-sugar conditions, however, AMPK activates and places a different, opposing chemical modification on ACC2, which represses PHD3 activity and allows fatty acids to enter the mitochondria to be broken down for energy.

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Next, the researchers explored the connection between PHD3 activity and AMPK. Using genetically modified mice that do not express PHD3, the team found that PHD3 is most highly expressed in skeletal muscle cells and AMPK has previously been shown to increase energy expenditure and exercise tolerance, the team carried out a series of endurance exercise experiments.

"The question we asked was if we block out PHD3," Haigis said, "would that increase fat burning capacity and energy production and have a beneficial effect on skeletal muscle which relies on energy for muscle function and exercise capacity?"

Pollution linked to antibiotic resistance

Antibiotic resistance is an increasing health problem, but new research suggests it is not only caused by the overuse of antibiotics. It's also caused by pollution.

Using a process known as genomic analysis, University of Georgia scientists found a strong correlation between antibiotic resistance and heavy metal contamination in an environment, Jesse C. Thomas IV, an Assistant Professor in the College of Public Health and the Savannah River Ecology Laboratory, found

commonalities in soils contaminated with heavy metals on the US Department of Energy's Savannah River site near Aiken, South Carolina.

According to the study, published in the July issue of the journal *Microbial Biotechnology*, soils with heavy metals had a higher level of specific bacterial hosts that were accompanied by antibiotic resistance genes.

Hosts included *Acidobacteriaceae*, *Bradyrhizobium* and *Mycetozoa*. The bacteria had antibiotic resistance genes, known

as ARGs, for vancomycin, bacitracin and polymyxin. All three drugs are used to treat infections in humans.

The bacteria also had an ARG for multidrug resistance, a strong defense gene that can resist heavy metals as well as antibiotics, according to Thomas, who was conducting his doctoral research at the time.

When these ARGs were present in the soil, metal-resistant genes, or MRGs, were present for several metals including arsenic, copper, cadmium and zinc.

Strict diet explains metabolic effect of gastric bypass surgery

In many studies, bariatric surgery has been highlighted as an almost magical method for weight loss and reversing type 2 diabetes. One question that has remained largely unanswered is how the effect of surgery differs from the effects of a strict low-calorie diet. This question has now been examined by researchers at Lund University in Sweden in a study published in the journal *Diabetes*.

the study with associate professor Peter Spigel.

In a bariatric operation, a so-called gastric bypass, a large part of the stomach and the first part of the small intestine are disconnected. The patient needs to lose weight before the operation in order to reduce the size of the liver and the amount of fat around the internal organs. This is done to reduce the risk of complications.

What we previously thought was an effect of the operation is actually due to the diet," says associate professor Niklas Wärnqvist, who led



Q & A on Consumer Rights

Q:

PROBLEMA SA PRODUCT QUALITY AND SAFETY?

A:

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