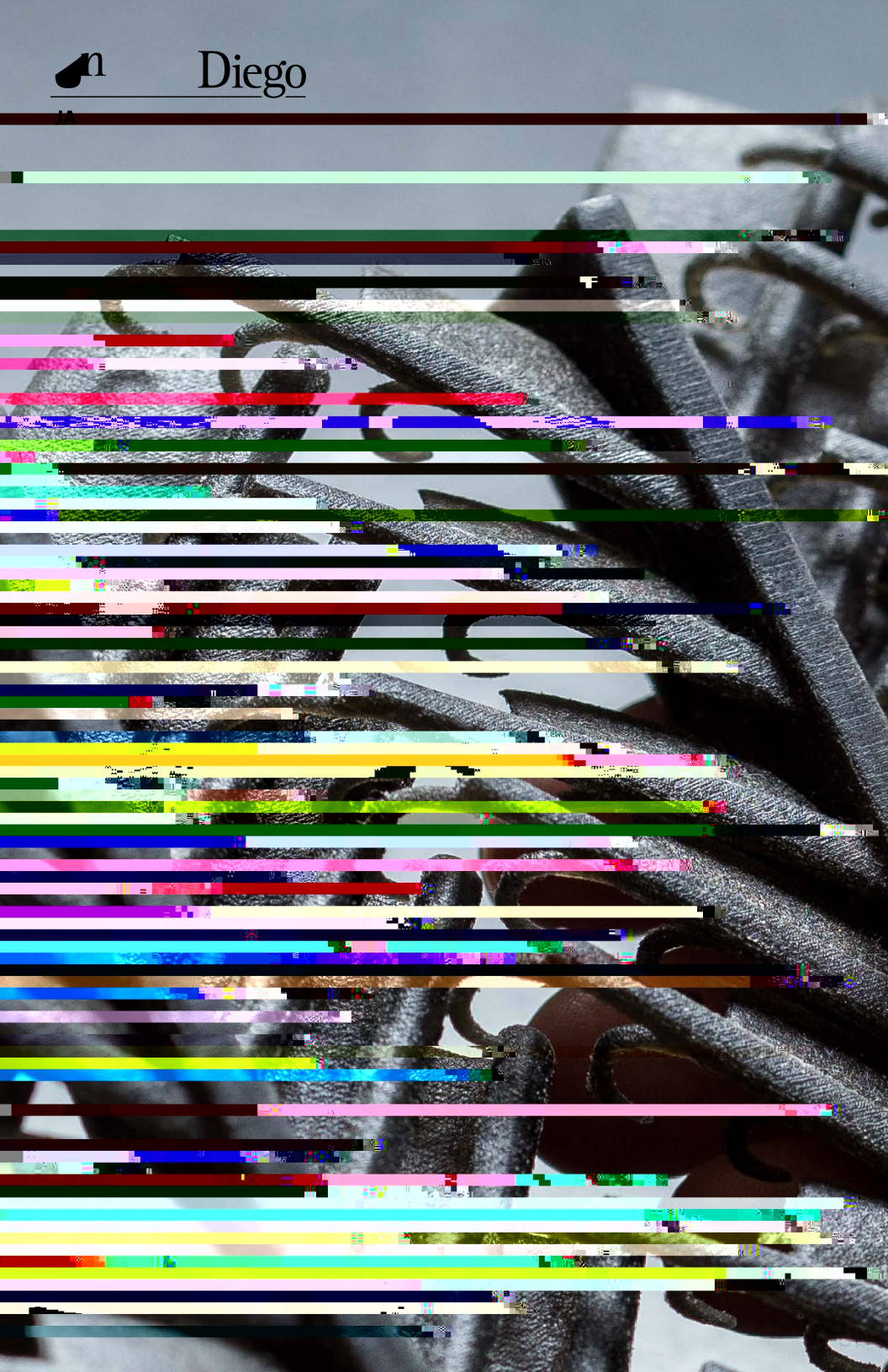
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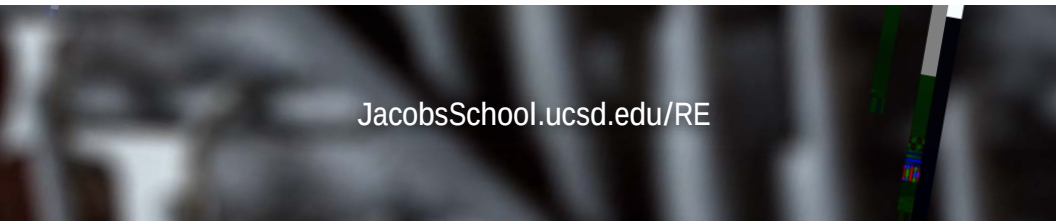

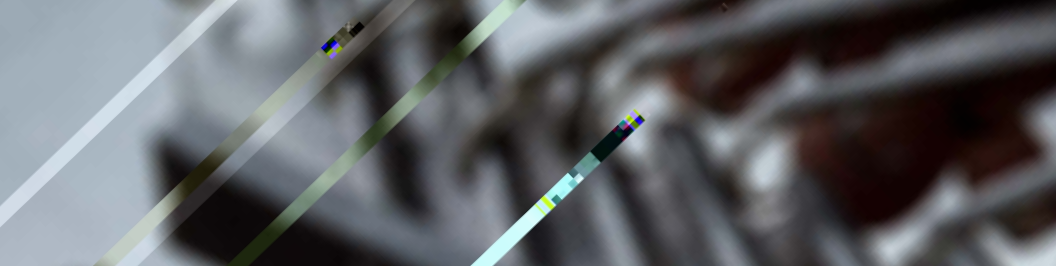

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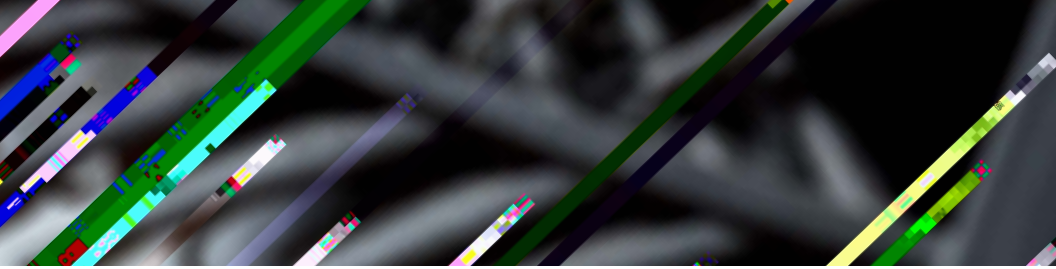

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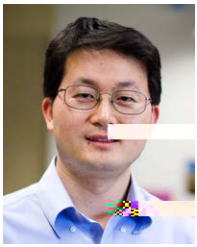

3:10 PM
BIOMIMETIC NANOVACCINES FOR CANCER IMMUNOTHERAPY

Presenter: Liangfang Zhang
NanoEngineering Professor
Co-Director, Center for Nano-ImmunoEngineering

Immunotherapy is now a key research strategy against cancer. The goal of anticancer vaccination is to train the immune system to properly utilize its own resources in the fight against cancer. This talk will highlight the use of nanotechnology for designing vaccine candidates that exhibit enhanced potency and specificity.

Related posters: 124, 125

CENTER FOR NANO-IMMUNOENGINEERING

Nanoengineering professors Liangfang Zhang and Nicole Steinmetz co-direct the newest agile research center at the Jacobs School of Engineering: the Center for Nano-ImmunoEngineering. The Center develops bio-inspired materials and technologies to activate, program, and reinstate optimal immune system function. This work opens new avenues for treating and preventing cancer, cardiovascular disease, autoimmune disorders and infectious disease. At the

BIOENGINEERING

1. INCREASED OXYGENATION DURING CHRONIC ANEMIA WITH PEGYLATED EARTHWORM HEMOGLOBIN
   Carlos Munoz, Krianthan Govender | Professor: Pedro Cabrales Arevalo

2. USE OF DYNAMIC TIME WARPING FOR DIGITAL VELOCITY ESTIMATION IN THE MICROCIRCULATION
   Krianthan Govender, Alfredo Lucas | Professor: Pedro Cabrales Arevalo

3. MICROCIRCULATION HYPERSPECTRAL IMAGING TO QUANTIFY OXYGEN DELIVERY VIA ANALYSIS OF HEMOGLOBIN OXYGEN SATURATION DURING HYPOXIA AND ANEMIA
   Alfredo Lucas, Carlos Munoz | Professor: Pedro Cabrales Arevalo

4. THE IMPACT OF BLOOD REPLACEMENT PRODUCTS ON COAGULATION
   Manon Magill | Professor: Pedro Cabrales Arevalo

5. POLYMERIZED HEMOGLOBIN TOXICITY IS DETERMINED ITS MOLECULAR SIZE

COMPUTER SCIENCE & ENGINEERING

18. DIFFERENTIAL PRIVACY WITH A CAPACITY BOUNDED ADVERSARY
    Jacob Imola | Professor: Kamalika Chaudhuri

19. CUFFLESS BLOOD PRESSURE MONITORING WITH A 3-AXIS ACCELEROMETER
    Po-Ya Hsu | Professor: Chung-Kuan Cheng

20. QUALITY OF SERVICE OPTIMIZATION FOR VEHICULAR EDGE COMPUTING WITH SOLAR-POWERED ROAD SIDE UNITS
    Yu-Jen Ku | Professor: Sujit Dey

21. MIXED-SIGNAL CHARGE DOMAIN ACCELERATION OF DEEP NEURAL NETWORKS THROUGH INTERLEAVED BIT-PARTITIONED ARITHMETIC

30. BRAIN-INSPIRED HYPERDIMENSIONAL COMPUTING: AN ENERGY-EFFICIENT COGNITIVE MACHINE
    Mohsen Imani, Justin Morris | Professor: Tajana Simunic-Rosing

31. ALOOK: ADAPTIVE LOOKUP FOR GPGPU ACCELERATION
    Daniel Peroni | Professor: Tajana Simunic-Rosing

32. PROCESSING 5 (rKA 21C /Spa9 (E)7.5 ((I).5 (i)T0.2472.8001 Tm0 0 0 1 7 jETEMC

61. ADAPTIVE CLUSTER LOCALIZATION USING REPEATED SBL
Aditya Sant | Professor: Bhaskar Rao

62. ON REDUCED DIMENSION BEAMSPACE PROCESSING SUITABLE FOR CHANNEL ESTIMATION IN MMWAVE COMMUNICATIONS
Rohan Ramchandra Pote | Professor: Bhaskar Rao

63. USING DRONES FOR RADIO TRACKING WILDLIFE
Nathan Hui | Professors: Curt Schurgers, Ryan Kastner

68. EXTENDING THE APPLICABILITY OF SPECTROSCOPY FOR THE INVESTIGATION OF DYNAMIC MECHANICAL BEHAVIOR OF POLYMERS

Nha Uyen Huynh | Professors: Prabhakar Bandaru, George Youssef

78. ENGINEERING CELLS WITH MULTIFUNCTIONAL NANOMATERIALS TO IMPROVE STEM CELL THERAPY EFFICACY IN MYOCARDIAL INFARCTED MICE
Fang Chen, Eric Zhao | Professor: Jesse Jokerst

79. STOCHASTIC ACCELERATION OF ELECTRONS IN THE LASER AND QUASI-STATIC ELECTRIC AND MAGNETIC FIELDS

88. PROBING THE STRENGTH OF IRON AT ULTRA-HIGH PRESSURES AND STRAIN RATES
Gaia Righi | Professor: Marc A. Meyers

89. STRUCTURAL MODEL OF THE DEFORMATION OF PORCINE DERMIS

100. DESIGN AND MANUFACTURE MINIMALLY INVASIVE ENDOSCOPIC SUBMUCOSAL ROBOTIC SURGERY DEVICE

147. HEAT EXTRACTION FROM MUNICIPAL SOLID WASTE LANDFILLS
Leticia Nocko | Professor: John McCartney

148. ADVANCED MODELING OF LEAD RUBBER BEARINGS
Joaquin Marquez | Professor: Gilberto Mosqueda

149. HIGH-FIDELITY FINITE ELEMENT MODELING OF MOAT WALL IMPACT IN BASE-ISOLATED BUILDINGS
Patrick Hughes | Professor: Gilberto Mosqueda

150. HIGH-STAb2-2.4 (f)/2 (I(b)-8.(T)-9.5)-15.1 (D S)-22.6 (T9 (T)-42 (Y F)-6.8.7 (G) (H

CONTEXTUAL ROBOTICS INSTITUTE

157. UNCERTAINTY ESTIMATION IN CONTINUOUS MODEL FOR MODEL-BASED REINFORCEMENT LEARNING
Ibrahim Akbar | Professor: Nikolay Atanasov

158. LOCALIZATION AND MAPPING USING INSTANCE-SPECIFIC MESH MODELS
Qiaojun Feng | Professor: Nikolay Atanasov

159. SPARSE LEARNING-BASED OCCUPANCY MAPPING AND SAFE NAVIGATION IN UNKNOWN ENVIRONMENTS
Thai Duong, Zhichao Li | Professor: Nikolay Atanasov

160. MULTIROTOR AIRFRAME DESIGN WITH ROTOR ORIENTATIONS OPTIMIZED FOR FULLY ACTUATED FEEDBACK CONTROL
Pengcheng Cao, Danny Tran | Professors: Thomas Bewley, Falko Kuester

161. EMBEDDED STRAIN SENSING IN PIEZOELECTRIC ACTUATORS FOR MICRO-ROBOTIC APPLICATIONS
Shivam Chopra | Professor: Nicholas Gravish

162. FROM A MICRO PARALLELOGRAM MECHANISM TO A NOVEL PRIMSTIC-PUSH-PULL ROBOT
Wei Zhou | Professor: Nicholas Gravish

163. TIP-TRACKING SYSTEM FOR THE VINE ROBOT
Connor Watson | Professor: Tania Morimoto

164. TRANSLUCENT SOFT ROBOTS DRIVEN BY FRAMELESS FLUID ELECTRODE DIELECTRIC ELASTOMER ACTUATORS
Caleb Christianson | Professor: Michael Tolley

165. GRANULAR JAMMING SOFT FOOT FOR IMPROVED TRACTION OVER NATURAL TERRAIN
Emily Lathrop | Professors: Michael Tolley, Nicholas Gravish

166. MORPHING STRUCTURE FOR CHANGING HYDRODYNAMIC CHARACTERISTICS OF A SOFT UNDERWATER WALKING ROBOT
MIchael Ishida | Professor: Michael Tolley

CENTER FOR VISUAL COMPUTING

167. LEARNING TO RECONSTRUCT SHAPE AND SPATIALLY-VARYING REFLECTANCE FROM A SINGLE IMAGE
Zhengqin Li | Professors: Manmohan Chandraker, Ravi Ramamoorthi

168. LEARNING GENERATIVE MODELS FOR RENDERING SPECULAR MICROGEOMETRY
Alexandr Kuznetsov, Zexiang Xu | Professor: Ravi Ramamoorthi

169. DEEP VIEW SYNTHESIS FROM SPARSE PHOTOMETRIC IMAGES
Zexiang Xu | Professor: Ravi Ramamoorthi

CENTER FOR WEARABLE SENSORS

176. AUDITORY EVENT-RELATED POTENTIALS (A-ERP) MEASURED FROM INTEGRATED IN-EAR EEG FOR HEARING EVALUATION AND BRAIN-COMPUTER INTERFACE
Akshay Paul | Professor: Gert Cauwenberghs

177. IMAGING THE PERIODONTIUM WITH ANATOMICAL AND MOLECULAR CONTRAST USING PHOTOACOUSTIC ULTRASOUND
Colman Moore | Professor: Jesse Jokerst

178. HEALABLE THERMOPLASTIC FOR KINESTHETIC FEEDBACK IN WEARABLE HAPTIC DEVICES

CALIBAJA CENTER FOR RESILIENT MATERIALS AND SYSTEMS

188. DYNAMIC FRACTURE OF CARBON FIBER COMPOSITES UNDER MARINE CONDITIONS
Rodrigo Chavez | Professor: Veronica Eliasson

189. SOLVOTHERMAL SYNTHESIS APPROACH OF HIGH ENTROPY METAL CARBIDES: A NEW CLASS OF ULTRAHIGH TEMPERATURE, IRRADIATION RESISTANT CERAMICS
Ved Vakharia | Professor: Olivia A Graeve

190. DIFFERENTIATION ASSAY OF OSTEOBLAST CELLS IN LUMINESCENCE HYDROXYAPATITE
Fabian Martinez | Professor: Olivia A Graeve

191. SYNTHESIS METHODS OF BATIO3 WITH CUBIC MORPHOLOGY: A LITERATURE REVIEW
Maritza Sanchez | Professor: Olivia A Graeve

192. SAM2X5: STRONGER THAN THE STRONGEST STEEL
Arash Yazdani | Professor: Olivia A Graeve

193. SUPERELASTIC RESPONSE AND SHAPE MEMORY BEHAVIOR IN CERAMIC MATERIALS
Hamed Hosseini Toudeshki | Professor: Olivia A Graeve

194. DSC STUDIES OF THE COMBUSTION SYNTHESIS OF LAB6 AND CEB6: THE EFFECT OF KCL AND LICL ADDITION
Carlos Ingram Vargas Consuelos | Professor: Olivia A Graeve

195. DIFFUSION STUDIES OF STRUCTURALLY AMORPHOUS METAL FOILS USING MOLECULAR DYNAMICS SIMULATIONS: DIFFUSION COEFFICIENTS AND CONNECTION TO MACRO-PROPERTIES
Jordan Campbell | Professors: Olivia A Graeve, Carlos Ruestes

196. BIOINSPIRED STIMULI-RESPONSIVE COLORATION THROUGH THE CEPHALOPOD LENS: A LITERATURE REVIEW
Ivan Torres | Professor: Olivia A Graeve

197. PHASE STABILITY AND MISCIBILITY IN ALCOHOL MICROEMULSIONS: DO REVERSE MICELLES FORM IN ETHANOL/AOT/N-HEPTANE SYSTEMS?
Robyn Ridley | Professor: Olivia A Graeve

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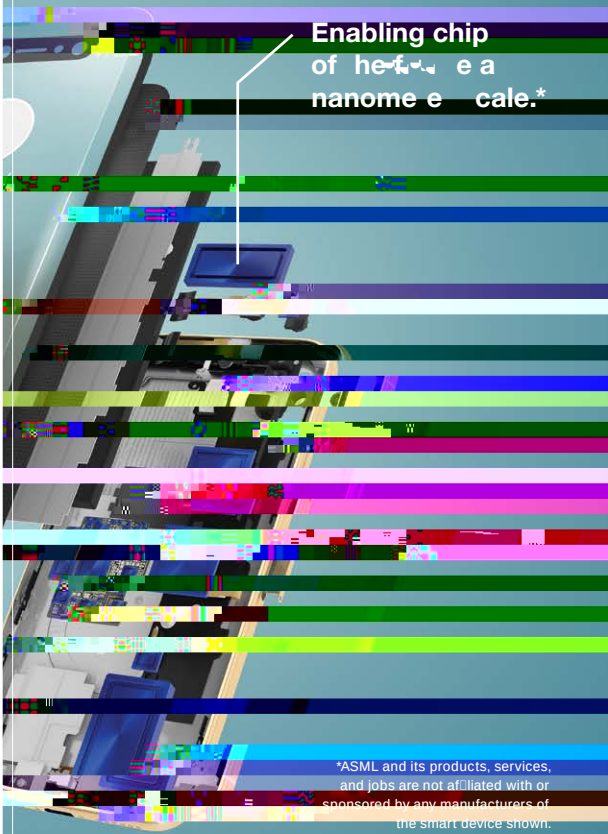

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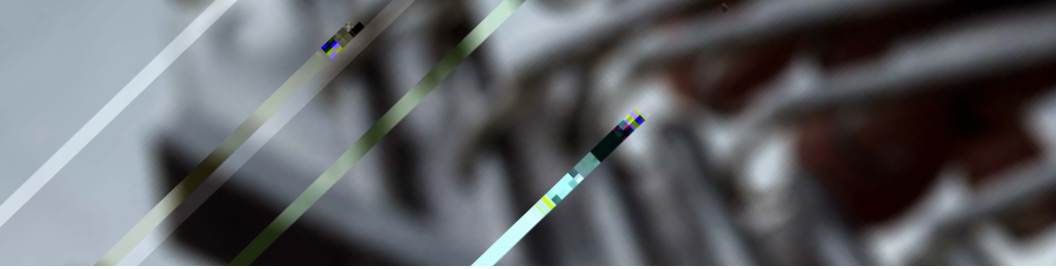

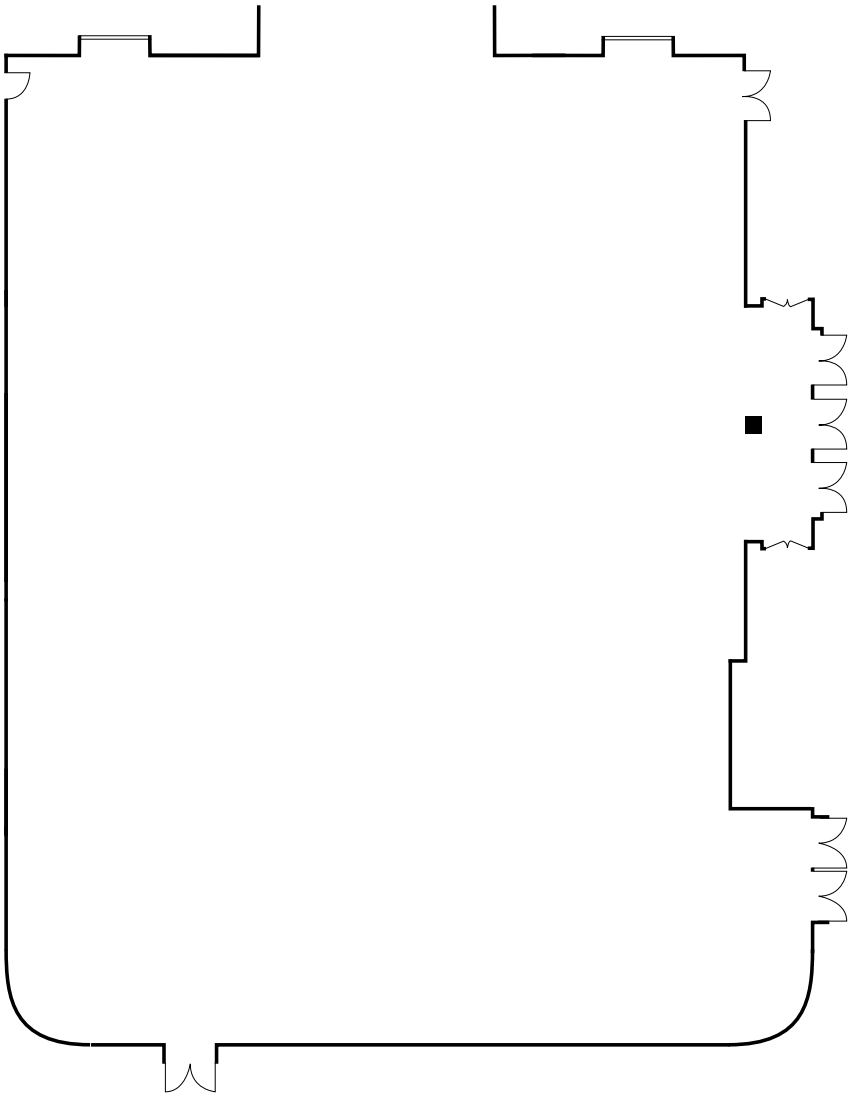

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