The following programs are organized by RRGI virtually from November 2020 till May 2021

Nov 2020

First virtual meeting of Institution Innovation council for year 2020 -2021 RRMCH

The first council meeting of Institution's Innovation Council (IIC) of RajaRajeswari Medical College and Hospital, Bangalore was conducted on 20th November 2020 virtually, attended by external experts and our medical college students. Our Resource persons stressed the importance of inculcating the innovation culture in the medical college campus. He also defined the methodology of creating an Innovation Ecosystem in the medical college campus.

Resolution undertaken in Council meeting of RRMCH IIC

- To conduct various innovation and entrepreneurship-related activities in time bound fashion.
- Organize periodic online workshops/ seminars/ interactions with entrepreneurs and Innovators
- Create an Institution's Incubation portal to highlight innovative projects carried out by the institution's faculty and students.

Topic: Entrepreneurship and Healthcare Innovation as Career opportunities for RRMCH MBBS Students after graduating

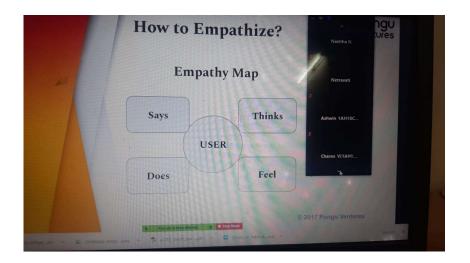
Our Resource person made our students understand the need of medical innovation in India. Medical innovation promises new ways to prevent, diagnose and monitor health problems, as well as new drugs and devices to manage and cure diseases. Medical innovation also means increasing knowledge and transforming existing processes and business models to better serve changing needs and expectations. Innovative business models, particularly those that integrate health care activities, can increase efficiency, improve care, and save patients time was emphasized to RRMCH students and faculty. Innovation in the health sector can be everything from improving systems used for nurses and doctors, new services for patients, as well as new products to support or make the job easier

Dec 2020

Topic: Problem Solving and Ideation in Medical field

External Innovation experts discussed the steps involved in solving a real world wicked problem, like Self-empowerment in Healthcare, Inadequate Healthcare to all, Health Literacy, Type 2 Diabetes, Mental Health & Psychological Issues in the Digital Age. The team also taught students about empathy in discovery of problems, and the need to use empathy maps for budding doctors. Apart from engaging faculty members, medical students, and practitioners in the problem discovery process, creative problem solving techniques are also taught to budding doctors and how they can adapt their mindset that is needed to address some complex problems in healthcare field in the pandemic era





Workshop on Design Thinking and Innovative Design

Resource person taught RRMCH students about Design Thinking and Critical Thinking. It was stressed upon students to understand that Design Thinking is people centric and that it is one of the best techniques available to solve a problem and find a right solution. Design Thinking is a problem-solving approach that can help create innovative solutions by inspiring new ways of framing problems and expanding the public health armamentarium with new tools and methods. It has facilitated improvements in patient, health care provider, and community satisfaction. In the context of public health, it has increased efficiency and collaboration in intervention development.

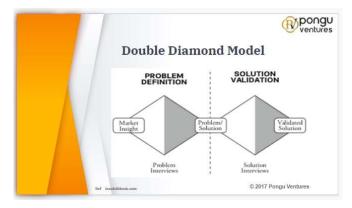


Jan 2021

Topic: Double Diamond approach for Innovation in Medical field

The Double Diamond design model has four stages: Discovery, Definition, Development and Delivery. Together, these stages work as a map designers can use to organize their thoughts in order to improve the creative process. The outside-in process of Double Diamond Design Thinking, a humanistic approach, is co-participatory and involves users from the very beginning. Combining this methodology and the traditional scientific methodology could improve the quality of studies in this field because the main focus is on the individual/patient/client/service. The DT methodology comes from meeting with advances in science and technology and the need to go beyond the frontiers aimed at developing products and services in healthcare and med tech.





Topic: Design Thinking for Healthcare Innovators

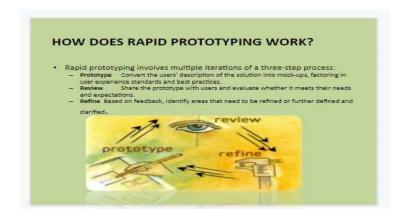
Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. Involving five phases—Empathize, Define, Ideate, Prototype and Test—it is most useful to tackle problems that are ill-defined or unknown. Design teams use design thinking to tackle ill-defined/unknown problems (aka wicked problems) because they can reframe these in human-centric ways and focus on what's most important for users. Design Thinking professionals seek solutions that aggregate and generate value and that can be quickly tested, validated and placed on the market or used for the patient's benefit. User interviews, client/patient secret sharing, brainstorms, and post-it notes across the wall are some examples of DT activities. The final DT "product" is an idealized, prototyped, tested and validated solution reached by users/patients.



Feb 2021

Topic: Rapid Prototyping for Engineers who are collaborating with Medical Professionals

Rapid prototyping is an iterative approach to user interface design that can help you test and validate ideas early in the design process. The core competence of rapid prototyping is to transform ideas into "tangible" prototypes at the earliest possible stage and to test them on the customer. When applying rapid prototyping in innovation management, it is particularly important that an idea is visualised as quickly as possible. The team made sure the students understood about the various sensors used in everyday medicos life and how they could be connected to cloud forming IoT. Rapid prototyping has been used to produce prototype implants, monitoring systems, and many other medical device prototypes including design and manufacture of implantable prostheses, surgical planning etc.



RAPID PROTOTYPING (RP)

Applications of Rapid Prototyping

5. BIOMEDICAL APPLICATIONS - I

- · Prosthetic parts
- · Presurgical planning models
- · Use of data from MRI and CT scan to build 3D parts
- · 30 visualization for education and training

5. BIOMEDICAL APPLICATIONS - II

- · Customized surgical implants
- · Mechanical bone replicas
- · Anthropology
- Forensics

March 2021

Topic: Women's Day Celebration (Saluting all the Women Healthcare Workers & Professionals)

To celebrate International Women's Day a session was arranged for IIC members of RRMCH to salute the Women healthcare Professionals like female nurses, vaccinators, doctors, pharmacists, lab experts who are at the frontline of healthcare and the backbone of the COVID-19 response. Also at RRMCH we are remembering and thanking all the women who were at the forefront of the war against COVID-19. Women scientists and doctors are at the forefront of the fight against the pandemic, and we are celebrating their collective achievements on International Women's Day. Also another main topic discussed was that Women who want to make an Innovative career in science and medicine can have a smoother journey only if they have a good family support as many years go into intensive studies, preparatory work and research.



Women Empowerment

- Promoting women's sense of self-worth,
- Women's ability to determine their own choices,
- Right to influence social change for themselves and others.

April 2021

Topic: Legal and Ethical Issues in Healthcare sector

As part of the 2020 -2021 IIC program, our external resource person and experts team conducted a workshop on How to plan for Healthcare Business: Legal and Ethical Steps. The healthcare sector is governed by sets of rules, regulations, laws and ethical standards. Laws are designed to protect patients when making decisions about their healthcare. In addition, they also set out the responsibilities of healthcare professionals. Students were

taught the importance of defining core values early on; integrating ethics into the medical practices; creating a culture of openness and welcome dissent; and learning from immediate peers or distant models. Ethics committees that are typically used in medical/health care and research settings are being repurposed for the medical and healthcare tech/startup context. Medical college students were taught the Legal standards which are useful as they help people to understand what they are not allowed to do, whereas ethical standards are primarily based on human principles of what is right and wrong.





- 1)Privacy (i)Personal data collected is conveyed
 - (ii) Terms and Conditions & Privacy Policy are reviewed
 - (iii) Data sharing practices are disclosed
- 2) Access & Usability (i) Accessible to diverse population
 - (ii) Tailored for end user
 - (iii) Short or long term use is feasible
- 3) Data Management (i) Data collection and storage protocols are appropriate
 - (ii) Who can access the data is described
 - (iii) Data secured using best practices
- 4) Risks & Benefits (i) Evidence exists to support validity and reliability
 - (ii) Risks are disclosed
 - (iii) Potential benefits outweigh risks

May 2021

Topic: Converting New Innovative Services into Healthcare Startup business

May 22 2021

Health information mobile App: Students who are interested can consider starting a web portal or app to provide health care information and advice. The expert team taught how one can create all kinds of content, such as podcasts, YouTube videos and even online recorded classes, in addition to live training. Students might even be able to get health care experts to contribute content for free in exchange for the publicity your site offers. There

are a lot of ideas that emerged during the session; to find new revenue streams to make their innovative healthcare service business highly sustainable in the long run..

Build a Health care Tech Product Fit for Market

May 29 2021

We discussed about how Artificial Intelligence (AI) has revolutionized healthcare, clinical applications in areas such as imaging and diagnostics to workflow optimization in hospitals to the use of health apps to assess an individual's symptoms