

JOHANSON

CONSTRUCTION



UNIVERSITY OF CHICAGO CYCLOTRON

Serving the construction needs of the Chicagoland Area for over 50 years



Mitchell Cyclotron

5841 South Maryland Avenue, Chicago, IL

The University of Chicago was one of the first academic institutions to install a cyclotron (particle accelerator) for medical imaging research. From 1967 to 1997, the University of Chicago was a leader in the production of short-lived radioactive isotopes and radio chemistry for use in imaging. To enhance the University's work in metabolic imaging, and to re-establish its leadership role, a new state-of-the-art cyclotron and research facility was installed in the sub-basement of Bernard R. Mitchell Hospital. Johanson Construction was hired to build the facility within this legacy space.



Cyclotron—Particle Accelerator



cGMP Hot Cells



cGMP Dispensing Hood



QA/QC Laboratory



Power Supply Room

Upon completion of commissioning, the cyclotron will be used to produce medically important, radioactive isotopes that are compounded into injectable drugs. To provide a more in-depth view of diseased tissues, the drugs are injected into the body and tracked using Positron Emission Tomography (PET) imaging equipment. This process can help facilitate earlier and more specific diagnoses which will result in more rapid and effective treatments for illnesses. This will impact significantly in the areas of oncology, cardiology, and neurology, among others. The 9,500 square foot research area contains:

- Concrete vault which houses the cyclotron
- Four (4) state of the art cGMP (current Good Manufacturing Practice) Hot Cell Rooms and one cGMP Dispensing Room (All ISO Class 7 clean rooms) which house Hot Cells (lead Lined Fume Hoods - ISO Class 6) and Lead Lined Dispensing Hoods (ISO Class 5) to be utilized to produce FDA compliant PET drugs
- Quality Assurance/Quality Control and Research Chemistry Lab Spaces
- Utility accommodations for a future Integrated Small Animal Research Resource (iSAIRR), which will be built to house imaging systems and rodents dedicated to small animal imaging research
- Power Supply Room Consisting of Data Center Style Construction Having a Self-Contained Cooling System, Clean Agent (Chemical) Fire Suppression System and Raised Access Flooring System

Although Installation of the cyclotron and supporting facility faced numerous challenges associated with working in the sub-basement of an existing building, the Johanson Construction team worked closely with the UCM project team to bring the project to successful completion.

Client Contact:

Richard Freifelder, Ph.D., Program Manager
University of Chicago, Chicago, IL

Architect:

Eric Bohn, Partner
JacobsWyper Architects, Philadelphia, PA



Since the company was founded, we have maintained a strong repeat and referral client base.

95%

of our projects consist of repeat or referral clients.

Safety
is the
foundation of
all Johanson
Construction
projects.

Our goal is to provide clients with turnkey service that extends beyond construction. With an average of over 35 years in the business, our staff's expertise in preconstruction, budgeting, cost control, and scheduling makes the team an invaluable resource for brainstorming, problem-solving and consultation. We typically self-perform all tasks required to provide a comprehensive construction management service, including carpentry. With experience in new and renovation construction, our service guarantees the highest quality results.

APPROACH TO CONSTRUCTION MANAGEMENT

At Johanson Construction, our fundamental approach to Construction Management is to listen to what customers need and want in their project and to find a way to meet those desires, while providing a positive, confident and enjoyable experience throughout the process. There can be many different people involved in a project that will, at times, have very different goals. Satisfying these varied needs is a challenge. The experienced and dedicated people we bring to your project ensure that the participants quickly develop into a highly functional Team. There are a number of specific tools and systems that we utilize in managing projects which all rely upon the use of effective communication. We want to ensure that everyone remains fully informed in regard to their specific areas of responsibility.

PROCESS

Once we understand your needs, we begin by offering professional recommendations and solutions. Once budget requirements are established, we are dedicated to evaluating materials, building systems, and construction methods for cost, schedule, and performance. We work collaboratively alongside the architect and project staff to develop a plan. We facilitate constant communication between project staff, the architect and our team to ensure the project is completed on time and on budget. In the event we need to adapt the project to better meet your goals we'll keep you up-to-date every step of the way.