**SUNY Upstate Cancer Center**  |  *Syracuse, New York*

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**Structural System**
- Foundation consists of cast-in-place concrete grade beams with a minimum 6” slab on grade. Grade beams sit atop drilled caissons which transfer load to bedrock.
- The superstructure is composed of structural steel.
- 30’ x 30’ typical bays composed of composite wide flange beams and girders.
- Floor construction is lightweight concrete topping on composite metal decking
- Lateral force resisting system is composed of ordinary braced frames in conjunction with moment connections.

**Mechanical System**
- Three 325 ton, electric, single compressor chillers with variable speed drives, used in conjunction with one triple cell cooling tower. (325 tons each cell)
- One 125 ton heat exchanger for winter use
- Three 88 BHP, natural gas / No. 2 fuel oil, hot water boilers. Preheat & Reheat Service
- Seven Custom industrial rooftop units with double wall construction provide 235,000 CFM.
- System consists of VAV boxes combined with a building automation system using Direct Digital Control Panels (DDCP) and Application Specific Controllers (ASC)

**Electrical System**
- Incoming service: 13.2 kV dual service stepped down via dual 5000kVA 13.2-4.16kV substation w/ secondary distribution switchgear at 5kV.
- A 3000kVA 480-208/120V transformer will provide distribution via a 1000A, 480/277V bus duct.

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**Building Information**
- **Occupancy Type:** Healthcare
- **Size:** 5 Stories, 90,000 Square Feet
- **Construction Dates:** Mar. 2011 – Sept. 2013
- **Cost:** $ 74 Million
- **Delivery Method:** Design - Bid - Build

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**Project Team**
- **Owner:** SUNY Upstate Medical University
- **Architect/Engineer:** EwingCole
- **Civil Engineer:** Klepper, Hahn, & Hyatt
- **CM:** LeChase Construction, LLC
- **Traffic Consultant:** Fisher Associates

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**Architecture**
- Five story central tower acts as a hub connecting the existing Upstate Medical University Hospital, Regional Oncology Center, and Gamma Knife Center.
- Features 27 private infusion rooms, three linear accelerator rooms, private counseling space, a personal boutique, meditation space, a family resource center, & a four seasons rooftop healing garden.
- Clad in white insulated metal paneling, interrupted with vision and spandrel glazing.
- 3-story North-East facing entrance atrium with entire façade enclosed by custom fritted glass curtain wall.
- Brick veneer and metal screening architectural accents.

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**Construction**
- The Upstate Cancer Center will be construction in multiple phases including a partial demolition of the Regional Oncology Center and the University Hospital.

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Michael Kostick  |  http://www.engr.psu.edu/ae/thesis/portfolios/2012/MVK5065/index.html  |  Structural Option