Whole Campus Implementation of 3-Year Curriculum
Medical College of Wisconsin
Lisa Grill Dodson, MD, Matthew Hunsaker, MD, FAAFP,

Program Overview
The Medical College of regional campuses employ the following medical education innovations:

- Whole campus implementation of three-year curriculum
- Community-engaged admissions process
- Integrated science and clinical learning
- Scholarly projects addressing local needs
- Longitudinal clinical experiences (MCW-Central Wisconsin)

Employing a community-engaged model, the regional campuses will prepare future physicians to work in primary care, general surgery, and psychiatry. This initiative aims to secure healthcare for patients and families and address a forecasted shortage by preparing a physician workforce with an intimate understanding of regional needs.

MCW regional campuses employ a three-year, immersive curriculum that utilizes local physicians as faculty. By removing vacation months and subspecialty elective time, MCW’s accelerated medical education program affords the opportunity for talented and motivated students to complete the same required coursework as their Milwaukee campus counterparts in 134 weeks instead of 154. Should their career interest require it, the regional campuses offer the opportunity for students to extend their curriculum to accommodate desired elective rotations.

Program Curriculum: Two Campuses, Two Different Clinical Learning Models

Basic Science Foundations
MCW regional campus medical students complete basic science coursework together with their four-year counterparts at MCW-Milwaukee, including all the same assessments on the same timeline. In addition, regional campus students have basic science concepts reinforced by real world patient care in early clinical experiences during the M1 and M2 years.

Early Clinical Experience
The blending of basic science with clinical learning is a hallmark of MCW’s three-year program. Medical students begin their education by completing Foundations of Clinical Medicine, a course teaching basic history taking and physical examination skills. Completion of this course prepares students to participate in a half-day per week clinical apprenticeship throughout the M1 year. This apprenticeship, as well as the clinically-oriented Continuous Professional Development (CPD) course, assures readiness for clerkship rotations.

Community Scholarly Projects
During the Scholarly Pathways course, MCW-Green Bay medical students complete Community-Oriented Primary Care (COPC) projects in conjunction with local organizations and non-profits. This process promotes public health while linking students’ medical education with both the resources of our clinical partners and the needs of local communities.

Program Status & Accomplishments (as of July 2017)
- First whole campus implementation of three-year curriculum in the U.S.
- MCW-Green Bay is fully enrolled with three classes. (80 medical students total)
- MCW-Central Wisconsin has matriculated the first two classes (50 students total) and will achieve full enrollment in July 2018.
- First students will graduate with MD in June 2018 (MCW-Green Bay) and June 2019 (MCW-Central Wisconsin).
- 100% of rising M3s at MCW-Green Bay passed the USMLE Step 1 in 2017 on the first attempt.
- $10.6 million in philanthropic gifts to regional campuses for launch and scholarships.
- Over 85% of regional campus medical students are from the state of Wisconsin.
- 250+ regional physicians are teaching or have expressed interest in teaching medical students.

Advice for Other Institutions
- Explain program in number of weeks comparison (134 weeks vs. 152 weeks) rather than three years vs. four years.
- Anticipate misunderstanding and resistance, and expect to need to do a lot of faculty development regarding accelerated curricula. FAQ’s and 1-2 page White Papers work well for busy faculty.
- Prepare students to expect and be able to handle naysayers.
- Longitudinal integrated clerkships are labor intensive, but well-suited to an accelerated model.

Program Contacts: Founding Campus Deans
MCW-Central Wisconsin: Lisa Grill Dodson, MD, ldodson@mcw.edu
http://www.mcw.edu/Medical-School/Central-Wisconsin-Campus.htm
MCW-Green Bay: Matthew Hunsaker, MD, mhunsaker@mcw.edu
http://www.mcw.edu/Medical-School/Admissions/Green-Bay-Campus.htm
MCW-Green Bay Curriculum
Modified Block Clerkships

There are multiple Clerkship rotation schedules, including the example below.

MCW-Central Wisconsin Curriculum
Longitudinal Integrated Clerkships

Year One - Summer
July  | August | September | October | November | December
Clinical Humanities (CHM) | Foundations of Clinical Medicine

Year One - Fall
January  | February | March | April | May | June
Clinical Human Anatomy (CHM) | Foundations of Clinical Medicine

Year One - Spring
January  | February | March | April | May | June
Clinical Human Anatomy (CHM) | Foundations of Clinical Medicine

Year Two - Summer
July  | August | September | October | November | December
CMI | Foundations of Pathological Processes - IM* | CMI

Year Two - Fall
January  | February | March | April | May | June
CMI | Foundations of Pathological Processes - IM* | CMI

Year Two - Spring
January  | February | March | April | May | June
CMI | Foundations of Pathological Processes - IM* | CMI

Year Three - Fall
July  | August | September | October | November | December
CMI | Foundations of Pathological Processes - IM* | CMI

Year Three - Spring
January  | February | March | April | May | June
CMI | Foundations of Pathological Processes - IM* | CMI

COURSE KEY:
- Basic Science Courses
- Early Clinical Course
- Clinical Rotations
- Scholarly Pathways

*CHM 1-4 is student elective in conjunction with the Clerkship rotate concurrently. **CHM 5-7 is a student elective in conjunction with the Clerkship rotate concurrently. ***CHM 8-10 is a student elective in conjunction with the Clerkship rotate concurrently.
Health Professional & Psychiatry Shortages in Wisconsin

Physician Shortage

By 2030, a shortfall of 2,000 doctors will severely limit healthcare access throughout the state, particularly in rural areas and underserved populations.

The MCW regional campuses will emphasize preparing students interested in primary care & general surgery.

(2011, Wisconsin Hospital Association)

Psychiatry Shortage

The MCW regional campuses will emphasize preparing medical students interested in psychiatry.

New psychiatry residency programs have been created in each region in order to attract and retain the students in the region for graduate medical education.

Physician Shortage

State faces mental health care shortages

Wisconsin meets just 20% of all need for mental health care, according to an analysis by the Kaiser Family Foundation based on a comparison of psychiatrists and the overall population. This puts Wisconsin behind every state except South Dakota. Counties with fewer than one psychiatrist available to care for every 30,000 people are designated as shortage areas – a problem especially in northern Wisconsin. Parts of other counties, including Milwaukee, also are considered shortage areas.
Physicians in the Community Pathway Scholarly Projects

MCW regional campus medical students are required to complete public health scholarly projects in conjunction with local organizations and non-profits.

The focus is on community healthcare projects that will address local health concerns. Local mentors from the participating organizations are guiding our students, who will use these vital lessons upon graduation when they begin their practice as community physicians.

The projects will link education with community needs and promote health in central and northern Wisconsin.

<table>
<thead>
<tr>
<th>Medical Student Project Titles [MCW-Green Bay, Class of 2018]</th>
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<tbody>
<tr>
<td>Using a smartphone application (Fooducate) to improve nutrition knowledge and dietary behaviors of pediatric patients and their primary caregivers.</td>
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<tr>
<td>Effects of an Intervention Targeting Core Strength and Gross Motor Skills on Gross and Fine Motor Skills, Personal Social Interactions and Social-Emotional Behavior</td>
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<td>Preventative Education with Community Partners</td>
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<td>Methods for preventing burnout and developing resiliency in medical students</td>
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<td>Process Improvement of Post-Partum Depression Resources</td>
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<td>Patient knowledge: the Correlation Between Hypertension, Diabetes, and Dental Hygiene</td>
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<td>Primary Care Intervention in Northeast Wisconsin: Arsenic in Well Water</td>
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<td>Increasing Cardiac Rehabilitation participation for Congestive Heart Failure Patients in Northeast Wisconsin</td>
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<tr>
<td>Advance Directives in Northeastern Wisconsin</td>
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<tr>
<td>Effects of Education on Hypertension Knowledge</td>
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<tr>
<td>Increasing follow up dental care in low income Brown County pregnant females</td>
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<tr>
<td>An Assessment of the After Visit Summary: Is It An Affective Method of Communication Between Provider and Patient?</td>
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<tr>
<td>Barriers to Healthy Eating and Wellness in Low-Income Populations and the Impact of the WIC Program's Farmer's Market Nutrition Program</td>
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<tr>
<td>Analysis of Emergency Room usage by patients with non-emergent fevers in Green Bay</td>
</tr>
<tr>
<td>Ideal form and function: An educational approach to nutrition and weight management for high school wrestlers</td>
</tr>
<tr>
<td>Attitudes and Perceptions of Domestic Violence among young Hmong adults of Wisconsin</td>
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The regional campuses are a collaborative effort engaging area civic, academic, healthcare, and community partners. From admissions to clinical learning, community members work closely with our students, staff and faculty to align the regional campus mission to local opportunities and needs.

As shown in the start-up funding chart below, philanthropic support from the local communities is critical to regional campus success.

### Regional Campus Start-up Funding Model

<table>
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<tr>
<th>Philanthropy</th>
<th>Other Sources</th>
<th>Total</th>
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<td>$15.0M (FY13-FY17)</td>
<td>$16.2M (FY13-FY17)</td>
<td>$31.2M</td>
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* Fund-raising may include some gifts or endowments that can’t be used to fund operating costs per donor restrictions.
**State of All Building Commission

- **Community Advisory Boards**: Drawn from each community, the Board includes our healthcare and education partners, MCW alumni, local civic and local government leaders, and community representatives.

- **Regional Applicant Advisory Committee**: Community members are trained by the MCW Admissions Committee. These dedicated volunteers screen and interview applicants and provide recommendations of suitability for the campus to the Admissions committee. The MCW Admissions Committee reviews all applicants and extends all offers.

- **Faculty**: Collaboration with physicians and senior science faculty from educational partners is a critical component to the success of this collaborative model. MCW has developed faculty from existing medical practices in the region.

- **Physicians in the Community Pathways Partners**: Students partner with community health or healthcare organizations to complete a research project in the community.

- **Standardized Patients**: A diverse cadre of community members are trained to role play during student clinical learning and exams so that students can learn excellent patient interaction skills. Standardized training ensures a comparable experience for each student and minimizes variability between patients.

- **Pipeline efforts**: Significant effort is being made to help local high school and baccalaureate students to consider medicine as a career choice and to improve their preparation for future medical school attendance. Early outcomes show a region-wide increase in application and matriculation to medical schools in addition to the regional campus cohorts.

- **Philanthropy**: Philanthropic support is critical to MCW success of launching the regional campuses. The campaign goal is to raise $15 million to support launch. The Green Bay Packers Foundation matched scholarship gifts for MCW-Green Bay medical students, which led to $800,000+ designated for the campus in 18 months.

- **Marquette Medical School / MCW Alumni**: Alumni are engaging significantly with the regional campuses to teach, volunteer, and contribute philanthropically.
What is a Longitudinal Integrated Clerkship?
Longitudinal integrated clerkships (LiCs) have the following common core elements:

• Medical students participate in the comprehensive care of patients over time
• Medical students have continuing learning relationships with these patient's clinicians
• Medical students meet, through these experiences, the majority of the year's core clinical competencies across multiple disciplines simultaneously

Why is MCW-Central Wisconsin developing CWIC?
• A new campus provides opportunity to differentiate MCW's curriculum
• A Longitudinal Integrated Clerkship meets needs of MCW-Central Wisconsin educational partners, and creates an additional option for MCW, and students
• A Longitudinal Integrated Clerkship increases learning flexibility
• Longitudinal Integrated Curricula utilize additional adult learning and workplace learning models
• The large geographic area covered by the MCW-Central Wisconsin campus is less amenable to moving students around on block rotations than placing them in longitudinal experiences
### Integrated Clerkship Session 1 Requirements

#### Administrative:
- Site coordinator
- Lead faculty preceptor for site
- One or more faculty with MCW appointments in:
  - Family medicine
  - Medicine
  - Surgery
  - Pediatrics
  - OB/GYN
  - Anesthesia

#### Academic schedule:
- CWIC 1 begins **no earlier than** Tuesday, May 30, 2017
- CWIC 1 begins **no later than** Monday, June 5, 2017
- CWIC 1 **ends on** Tuesday, August 8, 2017
- Final evaluations due no later than Friday, September 1
- A maximum of one week vacation time (including both weekends) may be taken during the clerkship

#### Clinical release dates:
- Wednesday afternoons (1-5 pm) for didactics
- Monday, May 29 (Memorial Day)
- Friday, June 23 (Exam), students should not be on call the night of June 22.
- Tuesday, July 4 (Independence Day holiday)
- Friday, July 14 (Exam and White Coat Ceremony), students should not be on call the night of July 13.
- Thursday, July 27 – Saturday July 29 (AAFP Resident and Student Conference)—for approved students

#### Other logistics
- Call room availability for overnight call (where/when applicable)
- Local housing options (where/when applicable)

#### Academic Requirements
- Provide formative written feedback on student performance monthly
- Provide summative feedback including narrative comments at end of rotation
- Promptly notify CWIC coordinator and director of any student concerns (academic, professional, other)

#### Clinical requirements
- **FM 1 day per week**
- Students expected to round on 1-2 patients each morning with preceptor supervision
- Pediatrics ½ -1 day per week
- Surgery (general preferred, but specialty ok) ½-1 day per week, with exposure to anesthesia
- Internal medicine (general preferred, but specialty ok) ½ - 1 day per week
- OB/GYN ½ -1 day per week
- We will eventually require some experiences with neurology and psychiatry, but not necessarily this summer.
- ½ day didactic (Wednesday afternoons)
- 2 half days of clinical care “flex time” weekly. This is time for students to follow continuity patients (e.g. home visit, nursing home care, patient follow up for tests/studies/labs/procedures, or operating room time. Students may also pursue other clinical experiences, e.g. lab, pharmacy. This time should NOT be used for independent study, boards prep, or other non-clinic or non-patient care experiences.
Benefits.
Central Wisconsin Integrated Clerkship (CWIC) curriculum emphasizes continuity relationships with patients, faculty, and communities. This can have a number of benefits for all parties. Students develop improved skills and relationship building with patients students become more aware of, and able to manage, electronic health records, referral networks and other system components students become an ongoing component of an inter-professional team students provide “value added” service to both patients and practices related to additional services provided (such as a comforting patient on consultation visits, patient education, reduced degradation of empathy and patient centeredness during medical training improved patient satisfaction and sense of well-being deeper knowledge of patient’s illness and psychosocial situation students need only be oriented once rather than repeatedly throughout the year

Developing a patient cohort
The CWIC offers numerous opportunities for developing longitudinal relationships with patients. This can be structured by pre-assignment with patients selected by the preceptors or staff, student selection of patients met in various clinical settings, and patient request. There is also informal continuity that occurs by nature of being in the same clinical setting over an extended period of time. Patient can be followed during scheduled clinical time, during after-hours visits (ED or urgent care) or at alternative settings such as long-term care, home visits and accompanying patients to consultation visits. Atien panels or cohorts allow students to follow patients over time and through multiple episodes of care in the various settings in which they occur. Continuity of patient care can be planned, or sometimes evolves more spontaneously due to frequent visits.

Size of Cohort
Cohort sizes will vary depending on many variables, but a typically ranges from 20 to 40 patients over the course of the year. Patients may be selected based on their diagnosis, their complexity of illness, need for coordination of care, student interest, patient willingness, or other factors. Patients may be recommended by physicians or their staff if they attend clinic frequently, if they might benefit from extra services or time, or if they provide a particularly useful learning opportunity.

Responsibility to Cohort Patients
While students are expected to take an appropriate level of responsibility for all patients they are caring for, they may take on additional responsibilities for cohort or continuity panel patients. Students should attempt to be available for patient encounters across the various settings in which a patient might be seen. This could include primary care clinic, specialty consultation visits, surgical care, home visits, emergency department or other after-hours care, and diagnostic visits. While a student may not be available for every encounter, it is hoped that the student will be involved with patients care across multiple settings over time.

Challenges to Patient Continuity
While continuity is encouraged, patients and students should be given the opportunity to opt out of a continuity relationships during the year. For formal continuity relationships, a signed consent form is advisable. Scheduling appointments can be challenging, but attempts should be made to involve the student in as many aspects of the patients care as possible. Students can utilize flex time or make specific arrangements with preceptors to allow involvement across different settings. Patients can be encouraged to notify students when they have encounters with the system, both scheduled and unscheduled. Wherever possible technology can be used to notify automatically notify students when their cohort patients present for care. Students can also utilize EHR to communicate with patients for non-face-to-face continuity. Students should be encouraged and instructed in maintaining professional boundaries with patients. Attention should also be paid to closure of the relationship at the completion of CWIC.

Who to contact:
If you have any questions regarding CWIC, student involvement with patient care or need other information, please contact:

Jacob Prunuske, MD Assistant Dean for Clinical Learning jprunuske@mcw.edu 715 870-0910
Heather Roth Education Coordinator hroth@mcw.edu 715 870-0910
Lisa Grill Dodson, MD Campus Dean ldodson@mcw.edu 715-870-0919
The Community Faculty Preceptor plays a vital role in the education of MCW-Central Wisconsin students. The preceptor acts as a clinical resource while students apply the medical knowledge obtained during the didactic training. The lead preceptor must be a physician and is responsible for the on-site supervision, training, assessment, and evaluation of the student. Since students are preparing to interact with the entire health care system, daily teaching duties can be shared with other health professionals, staff, residents, physician assistants, or nurse practitioners, under the director of the physician preceptor.

**Student Schedule and work hour restrictions**

Students are expected to adhere to the Preceptor’s work schedule. Students are expected to work at the site at least 40 hours per week but this can vary depending on the site. Students are expected to work nights, weekends, and be on-call as required and available at the site. Students should adhere to national resident work hour restrictions: no more than 80 hours per week, and no more than 30 hours consecutively, in addition to other restrictions (see CWIC handbook for additional details).

**Didactic education**

Approximately one half day per week will be devoted to didactic educational time. Routine patient care activities should not be scheduled during this half day block. Extraordinary clinical experiences may be able to be accommodated, but students should notify MCW-CW faculty for approval to miss scheduled didactics.

**Clinical Experience**

Students should spend the majority of their time involved in supervised hands-on patient care activities. Seeing the broadest diversity of patients that is possible at the site enhances the learning experience, and all students should obtain exposure to patients across the entire life span and scope of each specialty.

**Objectives**

Students are given MCW learning objectives and requirements to guide their learning and to focus their study efforts for periodic medical knowledge exams. Students are required to document patient encounters throughout the clinical year. We ask that the preceptor review the learning objectives and requirements. These will be provided in the CWIC handbook.

**Supervision**

The preceptor is responsible for the overall supervision of the student’s educational experience at the clinical site. An assigned qualified practitioner (attending physician, resident physician, PA, NP) must be on the premises and available at all times while the student is performing patient care tasks. Student will be supervised in all his/her activities commensurate with the complexity of care being given, the student’s own abilities and with principles of good medical practice.

**Student Evaluation**

The preceptor must observe and assess the student performing clinical functions, including physical examination and documentation, on a regular basis and provide constructive verbal feedback to the student periodically over the course of the rotation. The preceptor may also be asked to give feedback on student performance to faculty members during site visits. The preceptor will be asked to completing an electronic evaluation of student competence and performance at intervals throughout the CWIC rotation and again at the end of the rotation using the MCW-CW form. Receiving honest critique and constructive feedback is critical to the academic and professional progression of a student.

**Faculty Evaluation**

Students will provide periodic evaluation of the Community Faculty Preceptors, and that will be made available via grouped data, until there is a sufficient number of evaluations to protect student anonymity, and then individual data will be provided to preceptors.

**Documentation**

Student documentation does not stand alone, and cannot be simply countersigned (ie “I have read and agree with above note” is not allowed). Preceptors must provide their own documentation and charting to the level required for the billing code selected. Students should have access to the Electronic Health Record system as allowed by health system policy, but at a minimum must have “read only” access to patient records. If health system policy does not allow student “write” access to the EHR, the preceptor to should assign (and subsequently evaluate) written notes, orders and prescriptions to the student. Students will also submit sample documentation to MCW-CW core faculty for periodic review.

**Assignment of Activities**

Students shall be directly involved in the evaluation and management of patients based on the clinical preceptor’s preference and the individual student’s skill and knowledge level. Patient encounter volumes vary depending on the specialty, location and practice; however, a student will typically see between 3-10 patients per day as the primary provider for the encounter for early rotations and 8-15 patients per day by the end of the clinical year. Students should not be used to substitute for regular clinical or administrative staff. The preceptor should assign the student to appropriate clinical oriented activities. This may include but is not limited to: history and physical examination; admission and discharge from hospital or day facilities; assisting with procedures/surgeries; clinical oriented paperwork (reviewing diagnostic test results and consultation reports, pharmacy refill requests, treatment prior authorizations, insurance/specialist referrals); diagnosis and treatment research; home or alternative care site visits; after hours call.

**Presentation**

Preceptors should have the student present patients on a regular basis.

**Teaching**

The Preceptor should allow time for teaching activities. This can be accomplished in a variety of ways such as structured teaching rounds, chart review periods, reading assignments, hallway or informal consultations between patient encounters and/or recommending specific conferences. It is expected that the preceptor will model, expose students to, and teach in accordance with current practice guidelines and the accepted standards of care.

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Regional Campus Leadership Teams

MCW-Green Bay
- **Matthew Hunsaker, MD, FAAFP** – Founding Campus Dean
- **Craig Hanke, PhD** – Assistant Dean, Basic Science
- **Michael Medich, MD** – Assistant Dean, Clinical Learning
- **Sunny Debelak** – Campus Administrator

Collaborating Partners
Bellin College
Bellin Health
Hospital Sisters Health System – Eastern Wisconsin Division
Prevea Health
Milo C. Huempner VA Outpatient Clinic
Northeast Wisconsin Technical College
St. Norbert College
University of Wisconsin-Green Bay

MCW-Central Wisconsin
- **Lisa Grill Dodson, MD** – Founding Campus Dean
- **Roy Long, PhD** – Assistant Dean, Basic Science
- **Jacob Prunuske, MD** – Assistant Dean, Clinical Learning
- **Theresa Gutsch** – Campus Administrator

Collaborating Partners
Ascension Healthcare
Aspirus, Inc.
Northcentral Technical College
University of Wisconsin-Marathon County
University of Wisconsin-Marshfield/Wood County
University of Wisconsin-Stevens Point
Regional Campus Photos: Community Engagement, Technology, and Early Clinical Learning