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— DR. MARKUS BLATZ

# AN EVOLUTION IN CLINICAL EDUCATION

## STRENGTHENING THE SCHOOL'S CLINICAL EXPERIENCE IS ELEVATING EDUCATION AND CARE

OPPOSITE: Students and faculty providing care within the Robert I. Schattner Clinic. There are now six full-time faculty leading six Primary Care Units (PCU) as PCU Directors for predoctoral clinical instruction. With the PCU Directors now full-time roles, there is greater opportunity to instruct students both during and between patient visits.

IN THE SPRING OF 2019, the Clinical Education Review Committee, a group of faculty and administrators, was formed to evaluate Penn Dental Medicine's clinical education program, identify goals, and lay out proposals to meet those goals. Charged with creating an "innovative, patient-centered, evidence-based clinical education experience," the team (see p. 26) examined myriad aspects of clinical education, building on the strengths of the School's existing program to make it not just better, but the best it could be.

"Educational methods and clinical dentistry are always changing, and our goal is to be sure we are changing with them — evolving with those advances and providing the most up-to-date educational experience," says Dr. Markus Blatz. Professor and Chair of the Department of Preventive and Restorative Sciences, whose Department has been engaged in implementing these changes, many of which launched with the start of this academic year. "We are focused more than ever on being proactive and innovative to ensure excellent patient care and enhanced higher-level learning experiences for our students."

Over the past few years, that has involved everything from the development of the School's digital learning technologies that have transformed the teaching model in the classroom to the rapid growth of digital dentistry and CAD/CAM technologies being taught and applied through the new Digital Design and Milling Center and the Center for Virtual Treatment Planning that opened earlier this year.

"These are all pieces of a bigger puzzle," says Dr. Blatz, "with the goal of staying on the leading edge from both an educational as well as clinical standpoint."

### **EDUCATION EVOLUTION**

#### **EDUCATION AND PATIENT CARE: INEXTRICABLY LINKED**

The Committee's efforts defined initiatives to enhance clinical education and patient care. They range from nuts-and-bolts adjustments to the clinical schedule and expanded rotations for all students, including at Penn Dental Medicine's community health sites, to an emphasis on School-wide standardization and philosophical alignment. All of the initiatives are designed to bolster clinical education, while improving patient access to quality care.

Helping to guide the implementation process has been Dr. David Hershkowitz, who joined Penn Dental Medicine in the fall of 2019 as Division Chief of Restorative Dentistry, a newly created role. Dr. Hershkowitz came to the School from New York University (NYU) College of Dentistry, where he managed the predoctoral clinical facility and served as Clinical Associate Professor and Associate Chairman of the Department of Cariology and Comprehensive Care.

"Dr. Hershkowitz has been a critical addition to our Department," says Dr. Blatz. "While we had administrative leaders of our other two divisions — Community Oral Health and Pediatrics – we never had the same for Restorative Dentistry. This leadership role is integral to building the strength and depth of the Department."

Over the past year, Dr. Hershkowitz has eagerly taken up the task of working with faculty to help move the new initiatives forward. Reflecting on that process, he stresses that dental education and patient care are inextricably linked.

"I believe that excellent patient care leads to excellent education, not the other way around," he explains. "Taking care of human beings leads to excellence in education."



# The Clinical Education **Review Committee**

Dr. Faizan Alawi, Associate Dean for Academic Affairs (Committee Chair)

Dr. Katherine France, Assistant Professor of Oral Medicine

Dr. Joan Gluch, Division Chief of Community Oral Health

Dr. Jon Korostoff, Professor of Periodontics

Dr. Mark Koup, Director of Comprehensive Care Clinics

Dr. Najeed Saleh, Associate Dean for Clinical Affairs

Dr. Frank Setzer, Clinic Director and Predoctoral Program Director, Department of Endodontics

Dr. Olivia Sheridan, Associate Dean for Admissions

#### **FULL-TIME FACULTY LEAD REDESIGNED CLINICAL EXPERIENCE**

How has the clinical experience changed in practical terms? From the way patients are scheduled and prepared for their appointments to their assignment to a student doctor, to follow-up care with their student providers, patient care — and student involvement in it — has been redesigned to improve efficiency, interpersonal contact, information flow, and continuity of care. In addition, clinical care hours have been extended into the evening four days of the week to offer more flexibility and better access to care for patients and families. The School now see patients on-campus until 8 p.m. Monday through Thursday.

"Our patients are hardworking people," says Dr. Hershkowitz. "They shouldn't have to take time off from work to go to the dentist, they should have options."

Perhaps one of the most significant changes is to the structure of the clinical care/instructional groups — the primary care units (PCUs) - themselves. Under the old structure, predominantly part-time faculty

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led 12 PCUs of around 30 students each. Now, six full-time PCU Directors (see box, right) oversee cohorts of just under 60 students. All have extensive experience as practicing clinicians and educators; four of the six -Drs. Karina Hariton-Gross (D'10), Margrit Maggio (D'87), Patrice Ierardi (MT'80, D'84), and Vincent Mayher - are longtime members of the Penn Dental Medicine faculty. PCU Directors Drs. Glenn Rochlen and Marie Congiusta joined the School's faculty from NYU College of Dentistry this summer. The PCU Directors also have additional administrative responsibilities to ensure best practices in the delivery of patient care, student education, and consistency in faculty calibration and standardization.

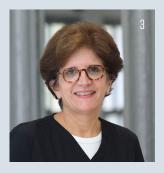
"These faculty members are like CEOs, with great administrative capabilities," says Dr. Blatz. "They have both the clinical and the didactic expertise needed to guide and mentor students, and they work closely with the part-time faculty in their groups to ensure instructional consistency."

Because the PCU Directors are now full-time roles, these faculty members have more opportunity to instruct and oversee students, both during and between patient visits. Reciprocally, students have full-time access to their instructors to address questions, concerns, and treatment options.

## **Expanding Full-Time Faculty**

















#### **PCU Directors**

- 1 | Dr. Marie Congiusta
- 2 | Dr. Karina Hariton-Gross (D'10)
- 3 | Dr. Patrice Ierardi (MT'80, D'84)
- 4 | Dr. Margrit Maggio (D'87)
- 5 | Dr. Vincent Mayher
- 6 | Dr. Glenn Rochlen

#### **Dental Director of Community Dental Care Centers**

7 | Dr. Leonard Jensen (D'77)

#### **Director of Operative Dentistry** 8 | Dr. Josephine Lomangino-Cheung



Dr. David Hershkowitz, Division Chief of Restorative Dentistry (left) with Dr. Markus Blatz, Chair of the Dept. of Preventive & Restorative Sciences. Dr. Hershkowitz took on this new leadership role in the fall of 2019.

## **EDUCATION EVOLUTION**

#### A SIGNIFICANTLY EXPANDED **CLINICAL EDUCATION**

One key outcome of the clinical changes is that students are spending more time caring for patients, building the knowledge and skills they need to be practicing dentists. They are engaged in clinical care more than any other group of Penn Dental Medicine students before them.

"We have given students a 26 percent increase in clinical time," says Dr. Hershkowitz, adding, "Every time students meet with patients, they are becoming better doctors."

With additional time providing clinical care, including through new emergency care operations and admissions protocols, students benefit from a greater diversity of experiences and develop confidence in treating an array of patients with a variety of complexities. They will now also spend more time in activities where they are engaged as primary practitioners, taking the lead under the guidance of their fulltime faculty mentors.

In addition, students are starting their hands-on clinical experiences earlier. Second-year students are now assigned to the clinic one morning a week to perform recall visits, oral hygiene instruction, and, eventually, simple operative dentistry on otherwise healthy patients. As a result, students will build valuable experience with patient care and clinical protocols prior to becoming fully immersed in clinical care their third year.

Patients benefit from the increased clinical time as well. With clinic hours expanded, patient wait times for scheduling an appointment are reduced, more can be done at each visit so the need for multiple visits is reduced, and follow-up procedures are scheduled more quickly.

The result is a more patient-centered experience — one concerned less with the number of procedures completed and more with each patient's comprehensive care and outcome.



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"Excellence in clinical care and clinical education cannot be based solely on numbers," says Dr. Blatz. "Our students and faculty are continuously focused on patients and providing them with comprehensive, high-quality care."

#### **EXPANDED COMMUNITY HEALTH ROTATIONS**

As part of students' added clinical experiences, rotations through the School's community health sites have also increased, with students gaining more exposure to the distinctive needs of economically disadvantaged patients. With Penn Dental Medicine's recent affiliation with Spectrum Health Services in West Philadelphia and expansion of its established community sites, the School is now caring for more patients in the neighborhoods where they live than ever before. (For a recap of Penn Dental Medicine's community sites, see p. 29.)

"Our goal is to make dental visits an easy choice for our patients," says Dr. Joan Gluch, Division Chief of Community Oral Health and a member of the Clinical Education Review Committee. "There are so many barriers to dental care. Meeting patients in their neighborhoods and providing access to culturally sensitive care helps reduce these barriers to increase dental visits and provide a broader range of clinical education for dental students."

Oversight of clinical instruction at the community sites falls under the direction of Dr. Leonard Jensen (D'77) in the newly created role of Dental Director of Community Dental Care Centers. Dr. Jensen is a longtime Penn Dental Medicine faculty member and a former Primary Care Unit Group Leader. He works with a team of ten part-time dentists and four full-time dental hygienists — all of whom are Penn Dental Medicine faculty members — who oversee student instruction and care at the sites.

All procedures and protocols at community sites are carefully calibrated with those of the School's 40th Street location, and student rotations in the community have been expanded dramatically. Groups of about 30 students rotate through the community sites each day in blocks of six to eight weeks to allow continuity and enhanced experiential learning. Expanded student time at the sites has also improved access to care for patients in their local neighborhoods.

"With faculty dentists guiding students at every community site, we can offer our patients the same level of quality and service, with less travel time and more comfort and convenience," Dr. Jensen says.

"It's a win-win for everyone," adds Dr. Gluch. "Patients have access to comprehensive primary dental care in their neighborhoods, with a clear referral route back to the School for advanced care when needed. And dental students are receiving more clinical experiences providing dental care with our West Philadelphia neighbors in a community setting."

"Meeting patients in their neighborhoods helps reduce barriers to increase dental visits and provide a broader range of clinical education for dental students."

— DR. JOAN GLUCH

OPPOSITE: With the revisions of the clinical education program, students are getting at 26% increase in clinical time. Clinical hours have been extended to 8 p.m. four days a week.

# In the Neighborhood

New and expanded community health sites enhance student and patient experiences.

In keeping with its mission to care for the city's most vulnerable populations and expand students' community-based learning experiences, Penn Dental Medicine has added a new community health affiliate site and expanded the number of chairs at its existing sites, bringing even more comprehensive oral health care directly to low-income and underrepresented neighborhoods.

With recent expansions, Penn Dental Medicine now has a total of 20 dental chairs in community sites and the clinical rotation time for third-and fourth-year students has increased to 200 hours per year, approximately one day per week. The sites include:

Spectrum Health Services: The School's newest community affiliation began this summer through a partnership with Spectrum Health Services, a federally qualified health center (FQHC) at its 5201 Haverford Ave. location in West Philadelphia. The seven-chair dental clinic provides comprehensive oral health care to patients of all ages in combination with their existing health care services.

"The clinic is run in a private-practice format, with ten students each day seeing a full schedule of patients," says Dr. Leonard Jensen, who currently serves as the clinic's faculty dentist. "Community residents are deeply appreciative of our presence here."

Mercy LIFE: Since 2010, Penn Dental Medicine has provided dental care at the LIFE (Living Independently For Elders) Center at 4508 Chestnut Street in West Philadelphia, with the facility there in the process of being expanded from one to four chairs. The mission of Mercy LIFE is to advance an interdisciplinary system of all-inclusive healthcare for frail seniors in West Philadelphia. Penn Dental Medicine faculty and students provide dental care as part of the interdisciplinary care team.

#### Penn Dental Medicine at Sayre Health

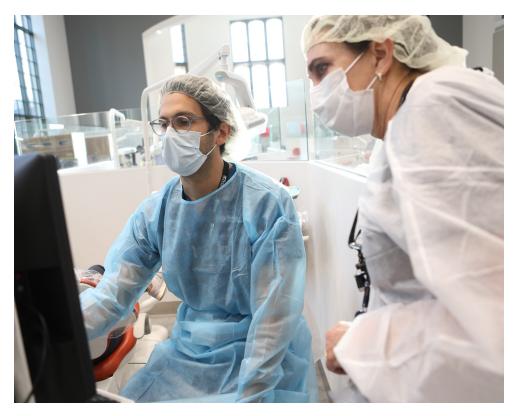
Center: Serving uninsured and underinsured residents of West Philadelphia, Penn Dental Medicine recently expanded from a one- to four-chair dental care center within Sayre Health Center, a FQHC located at the southern corner of Sayre High School at 5800 Walnut Street. Dental students and faculty provide comprehensive oral health care in collaboration with the interdisciplinary health care team for convenient access for patients to both medical and dental services.

#### Penn Dental Medicine at Puentes de Salud:

For Latin American immigrants in and around South Philadelphia, Puentes de Salud (1700 South St.), is a familiar name: the organization, in partnership with Penn Medicine, has been providing culturally sensitive health care for this underrepresented population since 2007. In early 2020, Penn Dental Medicine opened a dedicated three-chair dental facility within the Center to provide a much-needed dental home and comprehensive dental care for these patients.

PennSmiles Mobile Dental Care Center: The mobile care center of Penn Dental Medicine is fully equipped for on-site care for the city's schoolchildren, featuring two dental chairs and all the necessary equipment for preventive and general restorative care. In partnership with the School District of Philadelphia, students and faculty visit approximately 24 schools, recreation centers, and camps throughout West and Southwest Philadelphia, meeting children and their families where they are to deliver the care they need.

## **EDUCATION EVOLUTION**



#### **VALUABLE EXPERIENCE WITH SPECIAL-NEEDS PATIENTS**

Beginning this year, third- and fourth-year students will have yet another valuable clinical opportunity — the chance to rotate through the soon-to-be-completed Care Center for Persons with Disabilities (see story, p. 2), which will provide comprehensive dental care to patients with a full spectrum of disabilities.

According to Dr. Hershkowitz, patients in wheelchairs or on gurneys, and those with physical and/or cognitive conditions that make complying with dental care difficult, often wait months to see dentists who have the expertise and equipment to treat them. The 3,500-square-foot, 12-chair Center will increase access for these patients and ensure that every Penn Dental Medicine graduate is trained to treat them successfully.

"Patients with disabilities are often a forgotten population," says Dr. Hershkowitz. "The Disabilities Center provides them with a dental home where our students learn to treat them with the dignity and skill they deserve."

It's one more aspect of a new clinical education experience designed to optimize both student learning and patient access to care.

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#### **SCHOOL-WIDE CONTINUITY** AND CONSISTENCY

Finally, another key goal of the redesigned clinical experience is to ensure standardization and calibration for every aspect of clinical education and patient care throughout all levels of learning. To help close educational gaps and align teaching and care philosophies from the preclinical program to the clinical program, another key full-time faculty position — Director of Operative Dentistry - has been redefined and expanded. Taking on this role is Dr. Josephine Lomangino-Cheung, who joined Penn Dental Medicine this summer from NYU College of Dentistry. Dr. Lomangino-Cheung is responsible for overseeing instruction of both preclinical and clinical operative dentistry to ensure that best practices are standardized throughout a student's four years at Penn Dental Medicine.

"When our students learn to do a crown in preclinic, we want it to be done that way when they get to clinic. We are starting with a strong foundation in the first year and building on that over the next three years without any disconnect," explains Dr. Hershkowitz. "The result is a more consistent experience for both students and patients."

The significant growth in the use of chairside CAD/CAM technology at Penn Dental Medicine is also aiding in — and reflective of - the new standardization efforts, adds Dr. Blatz. "We are now designing and fabricating 70 to 80 percent of indirect, single-unit restorations using our in-house CAD/CAM resources," he says. "This increase is a great example of how we can see the new faculty structure working in terms of calibration and standardization as faculty are consistently teaching the use of chairside CAD/CAM. It is rewarding to see evidence — in real-time metrics — that the techniques and technologies we've put in place are indeed advancing both clinical education and patient care."

– By Juliana Delany