

Ψ PATH TO THE FUTURE

A Publication of the Department of Pathology and Laboratory Medicine at Indiana University School of Medicine

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NEW ON CAMPUS

IU Health Branding



Clarian Health



Indiana University Health

Clarian Health officially adopted the new name Indiana University Health (IU Health) on January 24. The change came from research indicating many patients and referring physicians did not fully understand the value of the affiliation between Clarian, Indiana University School of Medicine (IUSM) and Indian University. The intention is to communicate this affiliation and bring greater recognition for IUSM nationally.

The transformation began in December with a "Great Logo Recall". Employees donated over 40,000 Clarian Health-branding items, which were later sent to Africa to benefit the Indiana-Kenya Partnership. On January 23, TV commercials debut during the NFL's AFC Championship on WISH-TV8. Our own Dr. Thomas Davis, Culbertson Professor of Pathology, and a few students were shown during a lab class in the Medical Science Building (watch advertisement at <http://vimeo.com/17333940>). The next day, the first IU Health sign was placed on Fairbanks Hall. The remaining signs on hospitals, outpatient centers, ambulances and helicopters were placed throughout the spring. The new IU Health name does not impact the existing corporate structure of the organization. IU Health will remain an independent, non-profit health system with the Methodist Church and Indiana University Board of Trustees serving as corporate board members. ■

Neuroscience Research Center

January marked the ground breaking of Phase I at the Indiana University Health (IU Health) Neuroscience Center. IU Health and IU School of Medicine (IUSM) are partnering in the construction of an expansive neuroscience complex at 16th Street and Senate. The complex will contain three buildings completed in two phases. Phase I will consist of a six-level, 270,000 sq. ft. ambulatory care and imaging center and a six-



Ambulatory Care and Imaging Center
Rendering

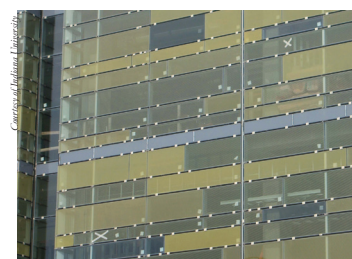


Neuroscience Research
Building Rendering

level parking garage. A skyway will span 16th Street connecting to the People Mover and Methodist Hospital. Phase I is scheduled to open during the summer of 2012. Phase II will consist of a neuroscience research building set to open in 2013. Three floors of the Phase I facility will bridge directly to the Phase II building. Connecting the buildings fulfills the vision for researchers and clinicians to work more closely together in order to bring bench research into the clinical arena faster. Dean of the IUSM and IU Vice President for University Clinical Affairs, D. Craig Brater, MD stated, "...we are committed to a multidisciplinary approach. The research building will welcome neuroscientists from many fields including psychiatry, neurology, neurosurgery, rehabilitation, radiology and pathology". ■

Eugene and Marilyn Glick Eye Institute

On August 19 the Eugene and Marilyn Glick Eye Institute was dedicated. The four-story 77,000 square foot building is located at 1160 West Michigan Road. The institute was made possible by Eugene and Marilyn Glick, Indianapolis residents who donated \$30 million to Indiana University to support vision research, eye care and education. Their support provided \$20 million for building construction and \$10 million for a research endowment to help fund scientific work in the new laboratories. The building uses elements of light, air, color and perspective in creating spaces for the different areas of the institute. Featured is a sweep-



Glass wall — Glick Eye Institute

ing glass wall on the south façade facing Michigan Street. The glass expresses the study of the eye through transparency and opacity. ■

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DEPARTMENT OF PATHOLOGY
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Mission Statement-

The Department of Pathology and Laboratory Medicine will be an international leader, training outstanding physicians, scientists, and laboratory professionals, advancing understanding of mechanisms of disease and improving medical practice through research, and providing out patients and clinical colleagues with advanced diagnostic services, on-time and at low cost.

RESIDENTS

Graduating 2011-2012 New



Jill Ferguson, MD

Dr. Ferguson will continue at Indiana University School of Medicine for a Fellowship in Cytopathology.



Shanon Lacy, DO

Dr. Lacy will begin a fellowship in Dermatopathology at Dartmouth-Hitchcock Medical Center.



Helena Spartz, MD, PhD

Dr. Spartz will continue at Indiana University School of Medicine for a fellowship in Cytopathology.



Jonathan Tongson, MD

Dr. Tongson will continue at Indiana University School of Medicine for a fellowship in Cytopathology.



Alden Webb, DO

Dr. Webb will continue at Indiana University School of Medicine for a fellowship in Dermatopathology.

Graduation 2011

The Resident and Fellow recognition dinner was held on June 10th at the Eiteljorg Museum in downtown Indianapolis.



(From left to right) Pic. 1—Dr. Matt and Anne Hagen Pic. 2—Dr. Jill Ferguson Pic. 3—Dr. Joyce Carter, Dr. John and Nancy Daniels and Dr. Thomas (TJ) and Meg Sozio Pic. 4—Dr. Andrew Bridge.



Cristina Cole, MD

Dr. Cole received her medical degree from the University of Toledo College of Medicine.



Ashley Kelly, MD

Dr. Kelly received her medical degree from Indiana University School of Medicine.



Ted Kieffer, MD

Dr. Kieffer received his medical degree from Indiana University School of Medicine.



Morgan McCoy, MD

Dr. McCoy received his medical degree from the University of Kentucky College of Medicine.



Sarah Reuss, MD

Dr. Reuss received her medical degree from the University of Toledo College of Medicine.



Megan Redelman, MD

Dr. Redelman received her medical degree from Indiana University School of Medicine.

FELLOWS

Graduating 2011-2012 New

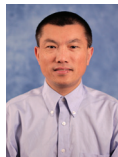


Andrew Armstrong, MD – Dermatopathology

Dr. Armstrong has been appointed to a staff position with Peoria Tazewell Pathology Group at the Methodist Medical Center of Illinois.



Indu Basil, MD – Cytopathology



Shaoxiong Chen, MD, PhD – Cytopathology

Dr. Chen has accepted a faculty position with our department in Cytopathology and Surgical Pathology.



John Daniels, MD – Forensics

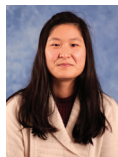


Matthew Hagen, MD, PhD – Neuropathology

Dr. Hagen has accepted a faculty position with the Department of Pathology at the University of Cincinnati.



Jamie Jacobsohn, MD – Surgical Pathology



Jennifer Kum, MD – Genitourinary

Dr. Kum has accepted a staff position in our department in Genitourinary Pathology and Surgical Pathology.



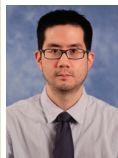
M. Trent McBride, MD – Cytopathology

Dr. McBride has accepted a staff position with Pinnacle Pathology/Western Pathology Associates in Scottsdale, Arizona.



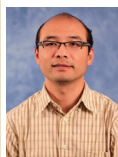
Raul Villanueva, MD – Microbiology

Dr. Villanueva has accepted a staff position with Puget Sound Institute of Pathology in Tacoma, Washington.



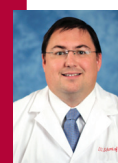
Benjamin Yan, MD, PhD – Hematopathology

Dr. Yan has accepted a faculty position with the Department of Pathology at the Medical College of Wisconsin.



Jiehao Zhou, MD, PhD – Hematopathology

Dr. Zhou has accepted a faculty position with our department in Hematopathology.



Jeremy Bigge, DO – Surgical Pathology

Dr. Bigge received his DO from West Virginia School of Osteopathic Medicine and attended residency at the University of Tennessee.



Andrew Bridge, MD – Dermatopathology

Dr. Bridge received his MD and residency training here at IUSM.



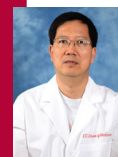
Casey Cress, MD – Hematopathology

Dr. Cress received his MD from Wayne State University and attended residency at Ball Memorial Hospital.



Jill Ferguson, MD – Cytopathology

Dr. Ferguson received her MD from the Medical University of Ohio in Toledo and attended residency here at IUSM.



Yingchuan Hu, MD, PhD – Genitourinary

Dr. Hu received his MD from West China University of Medical Sciences and attended residency at the University of Rochester.



John Lunetta, DO – Blood Bank/Transfusion Medicine

Dr. Lunetta received his DO from Kansas City University and attended residency at Ball Memorial Hospital.



Ken Obenson, MBBS – Forensics

Dr. Obenson received his MBBS from the University of Lagos in Nigeria and attended residency at Howard University in Washington, DC.



Helena Spartz, MD, PhD – Cytopathology

Dr. Spartz received her MD and residency training from IUSM. She also received her PhD in Microbiology/Immunology here at IUSM.



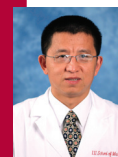
Jonathan Tongson, MD – Cytopathology

Dr. Tongson received his MD from the American University of the Caribbean, Netherlands Antilles and attended residency here at IUSM.



Alden Webb, DO – Dermatopathology

Dr. Webb received his DO from the Chicago College of Osteopathic Medicine and attended residency at here at IUSM.

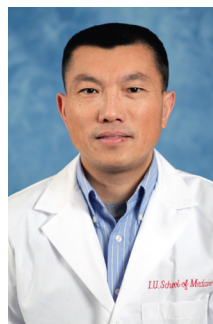


Xiaolin (Charlie) Wu, MD – Hematopathology

Dr. Wu received his MD from Anhui Medical University in Anhui Province of China and attended residency at Ball Memorial Hospital.

Welcome New Faculty

It's that time of year again. Fellows are becoming faculty and the department is expanding. Please help us welcome the new members of our faculty.



**Shaoxiong Chen, MD, PhD
Assistant Professor**

Shaoxiong Chen, MD, PhD joined our department as an Assistant Professor of Surgical Pathology and Cytopathology in July, 2011.

Dr. Chen received his medical degree in 1987 from Tongji Medical University in Wuhan,

China. After which, he accepted an Assistant Researcher position at the Chinese Academy of Preventive Medicine in Beijing, China. In 1998, Dr. Chen completed a PhD in the Department of Biochemistry at Tulane University School of Medicine in New Orleans, Louisiana. From there, Dr. Chen moved to the west coast for a Postdoctoral Fellowship at the University of California, Los Angeles in the Departments of Medicine and Pediatrics. His research focused on transcription initiation and termination during his graduate and postdoctoral training. In 2009, Dr. Chen completed residency in Anatomic and Clinical Pathology at the University of Toledo Medical Center in Toledo, Ohio. Subsequently, Dr. Chen completed a fellowship in Surgical Pathology at The University of Texas MD Anderson Cancer Center in Houston, Texas in 2010 and a fellowship in Cytopathology in our department in 2011. Dr. Chen is board certified in Cytopathology and Anatomic and Clinical Pathology.

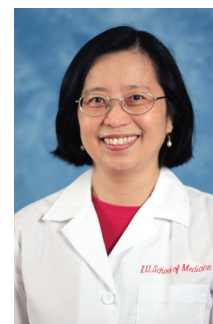


**Zandra D'Hue, MD
Assistant Professor**

Zandra D'Hue, MD joined our department in December, 2010 as an Assistant Professor in Surgical Pathology. Dr. D'Hue is located at IU Health Arnett Hospital in Lafayette, Indiana. Also, Dr. D'Hue

currently serves as the Medical Director of Pathology and Laboratory Services for IU Health White Memorial Hospital located in Monticello, Indiana.

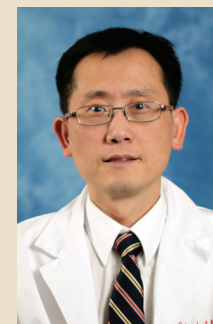
Dr. D'Hue received her medical degree from Indiana University School of Medicine (IUSM) in 2005. Prior to her medical training, Dr. D'Hue participated in a Master of Science Program at IUSM in 2001. Dr. D'Hue completed her residency training in Anatomic and Clinical Pathology at IUSM in 2009, where she served as Chief Resident of Scheduling for the 2008-2009 academic year. After residency, Dr. D'Hue started the company Diagnosis By D'Hue, P.C., which provided pathology services for various hospitals within Indiana. Dr. D'Hue is board certified in Anatomic and Clinical Pathology.



**Hong Du, PhD
Professor**

Hong Du, PhD joined our department as a Professor in April, 2011. She is currently conducting research in the area of lipid metabolism disorders leading to chronic

inflammation and cancer development. Hong Du received a PhD in Biochemistry from the City University of New York in 1989. After completed a PhD she was awarded a NIH Training Grant Fellowship at Rockefeller University, New York, in the Laboratory of Biochemistry and Molecular Biology with Dr. Robert G. Roeder. In 1993, she was appointed as a Research Associate in the Division of Human Genetics at the Cincinnati Children's Hospital Medical Center, which is part of the University of Cincinnati Department of Pediatrics. From 2007, until leaving the University of Cincinnati in April, her position was Associate Professor of Pediatrics. Hong Du is also a guest professor at the Chongqing University Medical Science in Chongqing, China.

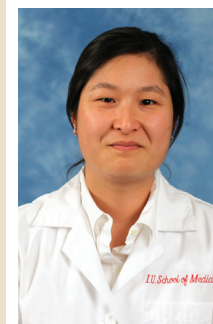


**Byeong Ha, MD, PhD
Assistant Professor**

Byeong Ha, MD, PhD joined our department as an Assistant Professor in Transfusion Medicine in January, 2011.

Dr. Ha received his medical degree in 1990 from

Seoul National University, College of Medicine in Korea. After receiving his medical degree, Dr. Ha began work in the Neuroscience Graduate Program at The Ohio State University on his PhD. He completed his PhD work in 1999. He continued at The Ohio State University as a Research Associate until 2004. Dr. Ha completed a Clinical Pathology Residency in 2008 after working on an Anatomic and Clinical Pathology residency for two years at MetroHealth Medical Center in Cleveland, Ohio. He was named Chief Resident his final year of residency. Following residency, Dr. Ha completed a fellowship in Transfusion Medicine from The Ohio State University in 2011. Dr. Ha is board certified in Clinical Pathology and Transfusion Medicine.

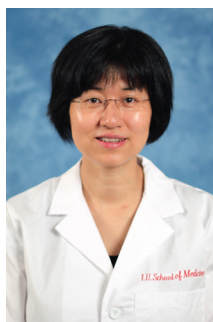


**Jennifer Kum, MD
Visiting Lecturer**

Jennifer Kum, MD joined our department as a Visiting Lecturer in Genitourinary Pathology in July, 2011.

Dr. Kum received her medical degree from the

University of California San Diego School of Medicine in 2005. After received her medical degree, she continued at the University of California San Diego for residency training in Anatomic and Clinical Pathology. She completed residency training in 2010 and was named Chief Resident that year as well. Following residency, Dr. Kum completed two fellowships at the University of California San Diego School of Medicine. In 2008 she completed a fellowship in Placental Pathology and in 2009 she completed a fellowship in Surgical Pathology. This summer, in our department Dr. Kum completed a fellowship in Genitourinary Pathology (2011). Dr. Kum is board certified in Anatomic and Clinical Pathology.



**Jingmei Lin, MD
Assistant Professor**

Jingmei Lin, MD, PhD joined our department as an Assistant Professor in Surgical Pathology with experience in Gastrointestinal Pathology in June, 2011.

Dr. Lin received her medical degree from Beijing Medical University in Beijing, China. She continued at Beijing Medical University to complete a Master's Degree in Medicine. Dr. Lin then completed a residency in the Department of Internal Medicine at the First Teaching Hospital of Beijing Medical University. Next, Dr. Lin came to the United States and completed a PhD at the University of Michigan at Ann Arbor in the Department of Pathology. In 2010, Dr. Lin completed her residency in Anatomic and Clinical Pathology at the University of Michigan at Ann Arbor. In 2011, she completed a fellowship in Gastrointestinal, Hepatic and Pancreaticobiliary Pathology at the Cleveland Clinic. Dr. Lin is board certified in Anatomic and Clinical Pathology.

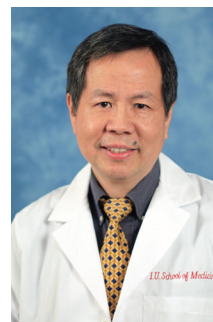


**Talia Muram, MD
Assistant Professor**

Talia Muram, MD joined our department as an Assistant Professor in Surgical Pathology with experience in Molecular Genetic Pathology in September, 2011.

Dr. Muram received her

medical degree from Indiana University School of Medicine, transferring here after one year at Tel-Aviv University Sackler School of Medicine. She then completed a residency in Anatomic and Clinical Pathology at the University of Colorado Health Science Center in Denver, Colorado. Subsequently, Dr. Muram completed a fellowship in Molecular Genetic Pathology at the University of Utah and ARUP Laboratories in Salt Lake City, Utah. After which, she remained on faculty as Assistant Medical Director in the Molecular Genetics Laboratory. After completing her two years at ARUP Laboratories, Dr. Muram moved to Chicago for a Surgical Pathology fellowship at the University of Illinois at Chicago and Stroger Cook County Hospital, completing in 2011. Dr. Muram is board certified in Anatomic and Clinical Pathology and Molecular Genetic Pathology.

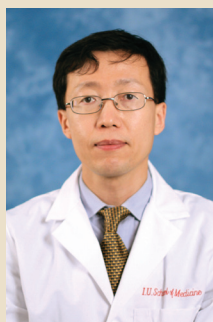


**Peter Ng, MD
Associate Professor**

Peter Sung-Tai Ng, MD joined our department as an Associate Professor of Clinical Pathology in Dermatopathology in June, 2011.

Dr. Ng received his medical degree from Kaohsiung Medical College in Taiwan (1977). Dr. Ng completed Pathology Residency Ball Memorial Hospital in 1993, where he was the Chief Resident from 1991-1992. During that time, he also completed an elective three month rotation in Dermatopathology at New York University. Dr. Ng completed a fellowship in Cytopathology at the University of Wisconsin Medical School (1994) and was a fellow in Cytopathology here at IUSM (1995). Next, Dr. Ng completed a fellowship in Dermatopathology at Jefferson Medical College in Philadelphia in 1999.

Prior to joining our faculty, Dr. Ng was the Director of Cytopathology and Dermatopathology at Flint Clinical Pathologist P.C. & Flint Medical Laboratory located in Michigan. Dr. Ng is board certified in Anatomic Pathology, Cytopathology and Dermatopathology.

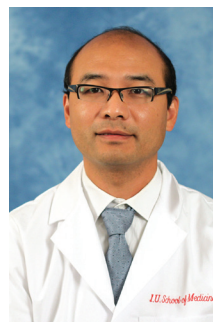


**Shanxiang Zhang, MD, PhD
Assistant Professor**

Shanxiang Zhang, MD, PhD joined our department as an Assistant Professor in Hematopathology in July, 2011.

Dr. Zhang received his medical degree in 1990

from Shanghai Medial University in China. He then completed a residency in the Department of Internal Medicine at The First Hospital of Nanjing Medical University in 1993. After several years as a graduate teaching and research associate at The Ohio State University and Columbia University, in 2005 Dr. Zhang began residency in the Department of Pathology at SUNY Downstate Medical Center in Bronx, New York. He completed residency in 2009 which was followed by two post-doctoral fellowships. First, in 2010 Dr. Zhang completed a fellowship in Oncologic Surgical Pathology at Roswell Park Center Institute in Buffalo, New York. Next, in 2011 he completed a fellowship in Hematopathology at Albert Einstein College of Medicine in Bronx, New York. Dr. Zhang is board certified in Anatomic and Clinical Pathology and Hematopathology.



**Jiehao Zhou, MD, PhD
Assistant Professor**

Jiehao Zhou, MD, PhD joined our department as an Assistant Professor in Hematopathology in July, 2011.

Dr. Zhou received his medical degree from Beijing Medical University

in 1994, where he was awarded the Excellent Medical Student Award for three consecutive years (1991-1993). Dr. Zhou earned a Master Degree in 1997 from the Institute of Virology, Chinese Academy of Preventive Medicine in Beijing, China. Dr. Zhou next earned a PhD in the Department of Pathology at the University of Southern California (USC) in 2003. Dr. Zhou continued at the USC in the Doheny Eye Institute as a Postdoc Research Fellow with research focusing on macular degeneration. Dr. Zhou completed a residency in Anatomic and Clinical Pathology at the University of Buffalo in 2010 and a Fellowship in Hematopathology here at Indiana University School of Medicine in 2011. Dr. Zhou is board certified in Anatomic and Clinical Pathology and Hematopathology.



**Michelle Zimmerman, MD
Assistant Professor**

Michelle K. Zimmerman, MD joined our department as an Assistant Professor with a subspecialty in Chemical Pathology in July, 2011.

Dr. Zimmerman received her medical degree

in 1998 from the University of Pennsylvania School of Medicine. After finishing her medical degree, Dr. Zimmerman began a career in the Air Force, starting with an internship in Internal Medicine at Lackland Air Force Base (AFB), Texas. After her internship, she completed flight surgeon training and served as the Chief of Physical Exams and Standards at Minot AFB, North Dakota. Dr. Zimmerman completed her residency in Anatomic and Clinical Pathology at Lackland AFB in 2006. After leaving the Air Force, she accepted a position at a private practice pathology group in San Antonio, Texas until 2010. Dr. Zimmerman then completed a fellowship in Chemical Pathology at William Beaumont Hospital in Royal Oak, Michigan (2011). Dr. Zimmerman is board certified in Anatomic and Clinical Pathology.

HISTORY OF THE DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

Written By Dr. Kathleen Warfel Hull

The Department of Pathology at Indiana University began in 1905. Much of the written history of the department before this segment has focused on its work in Anatomic Pathology. Now we shall see that with the arrival of Dr. Nordschow, a period of tremendous growth in Clinical Pathology began. <If you have comments on the history or old photographs or memories to contribute, please contact Dr. Kathleen Warfel Hull (hullk@crtc.com).>

The Department of Pathology, 1969-1991 “Building and Combining the IU Departments”

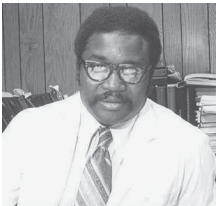
Building Clinical Pathology, 1969-1978



Dr. Carleton Nordschow

Dr. Carleton Nordschow was from Iowa. He had an AB *cum laude* in Chemistry from Luther College in Decorah, Iowa and an MD from the University of Iowa, where he later finished his training in Anatomic Pathology in 1961. He immediately joined the faculty and completed his Ph.D. in physical biochemistry in 1964.¹ This was the era in which the University of Iowa School of Medicine was amalgamating all of its separate departmental clinical laboratories into a central unified lab. Although Dr. Nordschow never had training in clinical pathology, he was chosen to be director of the newly combined clinical laboratories at the University of Iowa School of Medicine in about 1966. This echoed an earlier situation in our own department's history, when Dr. Clyde Culbertson, fresh out of medical school with no pathology residency experience, was asked to be director of the new Central Interdepartmental Laboratory at Indiana University School of Medicine (IUSM).

After Dr. Vellios left IUSM in 1968, leadership for the department's central laboratories was provided by a school committee led by Dr. George Lukemeyer in the dean's office. Beginning in 1969, Dean Glenn W. Irwin, Jr. hired Dr. Nordschow to stay for a week at a time as a consultant for the clinical laboratories at IUSM. Nordschow was then hired to lead the new Department of Clinical Pathology beginning January 1, 1970. This occurred just as Phase I of the new University Hospital was being completed.



Ed Hicks, Ph.D.

When he came as chair, Dr. Nordschow imported an Iowa group with him. Sue Hill and Gary Hill were brought to help with laboratory and departmental administration.² Duane Petsel and Lenny Emmanuel came from Iowa as pathology laboratory technicians, but later worked in administration. Dr. Nordschow also brought assistant professor Dean Bonderman and assistant professor Gary Proksch, both of whom were Ph.D. chemists who had been in the basic sciences at the University of Iowa.³ And, he brought Ed Hicks, Ph.D. who was a postdoctoral fellow in chemistry who had some grant funding for sickle cell anemia research.⁴

A period of active recruiting was necessary to build up the laboratory and clinical pathology department at IUSM. The labs were quite basic and primitive at the time compared to those at other university hospitals. Dr. Nordschow hired Homer Biggs, Ph.D. from Alabama, where he was the director of chemistry. Dr. Biggs received his doctorate in chemistry from the University of Iowa, where he and Dr. Nordschow became acquainted. Dr. Biggs brought his own Alabama contingent with him to work in the chemistry lab, including Tjien Oei, MD, Wells Moorehead, Ph.D. and the Kaspers.⁵ Because of the Bigg's connection, Dr. Nordschow also recruited John Griep, MD from Alabama to be director



Dr. George Lukemeyer and Dean Irwin



Lenny Emmanuel and Dean Bonderman, Ph.D.

1. At Iowa, Dr. Nordschow's research was in the area of aging of collagen. At IUSM, he set up a small collagen research lab but had little time to devote to it.

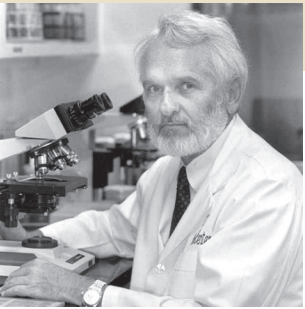
2. Michael Anthony was already at IU as the laboratory administrator. He worked with Dr. Nordschow until leaving in about 1983.

3. Proksch worked mainly in the hematology lab with reagents and Bonderman in the chemistry lab. The two developed an outside company supplying quality control materials and left IUSM in the midst of some controversy related to use of university facilities for outside endeavors in about 1980.

4. Although Hicks was unable to sustain a well funded program in sickle cell research, he remained on the faculty until the 1990's.

5. It is of interest that Dr. Oei had been Minister of Higher Education in Indonesia, dean of the medical school in Jakarta, and one of Sukarno's personal physicians, leaving the country before the coup. Mr. Kasper left to work at Eli Lilly and Company. Linda Kasper stayed at IUSM and was supervisor of the chemistry lab (1970-74). She then moved to the medical technology program in Fesler Hall, earned an Ed.D., and became director of the Medical Technology Program , a position she held until her retirement in 2006. According to Dr. Oei, a Dr. Junt was in chemistry for a time. He was originally from China but had a Ph.D. from Purdue. Also, a Dr. Pandrigoon was leaving chemistry as Dr. Oei arrived.

of the Division of Clinical Hematopathology.⁶



James W. Smith, MD

Other recruits hired to build his department were Dr. James W. Smith and Dr. Morris French. Dr. Smith came from the faculty at the University of Vermont School of Medicine to be director of the Division of Clinical Microbiology in 1970. Dr. Smith completed his pathology residency training at the University of Iowa. In 1971, Morris French, Ph.D. came from the California State Health Department to be director of the virology and serology laboratories. French later served for years as chair of the Laboratory Safety Committee and as the departmental administrator for space planning and renovation.⁷ In 1977, Dr. Smith recruited Steve Allen, MD, from the Centers for Disease Control and Emory University in Atlanta for his expertise in anaerobic bacteriology. Dr. Smith was head of the division and director of mycology, parasitology, and mycobacteriology labs; Allen was director of general microbiology and anaerobes; French was director of virology and serology.

First Changes in the Lab

Near the end of the Vellios lab era, the clinical departments were complaining about the timeliness and questionable accuracy of lab results. In particular, they drew comparisons between the lab at University Hospital-Riley Hospital and the automated (SMA-12) lab at Methodist Hospital. Upon arrival of Nordschow's new crew, one of the first changes tackled was to make the Technicon lab auto analyzer work. The second thing was to establish a new endocrine testing for Dr. Dexter.



Dr. John Griep and Betty Korn, 1973

Dr. Nordschow initially assigned people to positions: Dr. Griep did hematology, Dr. Biggs was head of all chemistry, Drs. Proksch and Moorehead did regular chemistry, Dr. Hicks did electrophoresis, and Drs. Oei and Bonderman did endocrinology. Soon, however, Drs. Proksch and Bonderman were moved to do research under Dr. Griep, and Dr. Hicks was moved to sickle cell research lab, leaving Dr. Oei doing endocrinology and electrophoresis. Other innovations were having an evening crew in the lab and having one of the six pathologists on call at all times.

Dr. Oei and others started to forge good relations with some of the clinical groups, beginning with improved creatinine

6. Dr. Griep later became chief of the laboratories at Wishard Hospital and earned a law degree. He left the department in 1983 for St. Elizabeth Hospital in Chicago, but he continues to be a consultant for the department.

7. Dr. French left to run his own company (Micro Air, Inc.) specializing in building and environmental air safety.

testing for Dr. Kleit in Nephrology. Within three years or so, Nordschow's labs were up to speed and competitive with laboratories elsewhere.

After a disagreement between the two, Dr. Nordschow isolated Dr. Biggs and put Dr. Oei in charge of all chemistry and endocrinology. Dr. Biggs left shortly thereafter.

New Special Areas in the Lab

New special areas in the clinical pathology lab were established in the early 1970s. Special hematology worked with the Medicine's Division of Hematology during this era as changes in that specialty were occurring. The traditional importance of cellular morphology was joined by an emphasis on cell biochemistry, physiology, and molecular structure. The special hematology lab did enzymatic studies, radio-immunoassays, spectrophotometry, and fluorescence testing.

In 1970, the hematology lab offered three coagulation tests (prothrombin time, platelet count, and capillary tube clotting time) that took only part of the time of one technician each day. By 1983, there were 44 coagulation tests offered in the special coagulation lab that was manned by a supervisor and 4 FTE plus 2 PTE techs. This University Hospital-Riley Hospital lab performed testing on specimens from the Veterans Administration (VA) Hospital and Wishard Memorial Hospital as well. Dr. Nils Bang had been on faculty in the Department of Medicine as a researcher in the Lilly Laboratory for Clinical Research and as head of the Laboratory for Clinical Coagulation Problems since 1966. He was also appointed to the Department of Pathology in 1980 and led the special coagulation laboratory for many years.

During this era the blood bank began a transition in services. In the early 1970s, blood component therapy began to be emphasized, and the first apheresis instrument in Indiana was acquired at IUSM in 1972. The blood bank had been using cryoprecipitate to treat hemophilia since 1965, and in 1976, a new program in cryobiology and cryopreservation was established. The Community Blood Bank of Marion County had been established in 1952. In 1973, it was renamed the Central Indiana Regional Blood Center and expanded its services, playing the major role in routine blood collection and distribution.⁸

The endocrinology lab expanded and began to do radio-isotope studies. A good trusting relationship developed with the clinical endocrinologist Dr. Dexter in the Department of Medicine. Dr. Dexter had been director of the endocrinology lab at Vanderbilt University. The pathology lab endocrinology section began to do many tests, though the Department of Medicine continued to have a separate endocrinology lab, directed by Dr. Peacock that did parathyroid hormone and some other tests.

“History” continued on page 8

8. Information from John Griep's written report in the French Lick retreat documents, 1983. The CIRBC later grew into the Indiana Blood Center, which now supplies blood and blood products to 46 member hospitals in central and southern Indiana.

"History" continued from page 7

Melvin Glick, Ph.D. joined the chemistry lab in 1973, focusing on electrolytes and the development of new tests. In about 1978, testing of blood and urine for levels of various drugs became important. The lab tested for compounds such as aspirin, phenothiazine, Valium, and methotrexate. The department worked with Dr. Baehner in pediatrics to develop testing for levels of VMA and catecholamines in young patients with pheochromocytoma. This helped improve the trust of the Riley Hospital physicians in the skill and reliability of the laboratory. The laboratory also helped in Dr. Lawrence Einhorn's work on measuring alpha-fetoprotein in patients with testicular cancer. ■

**To be continued in the next issue of
"Path to the Future"**

FARWELL TO FACULTY

Narasimhan Agaram, MBBS has accepted a position with the Memorial Sloan-Kettering Cancer Center in New York, New York.

Rebecca Marks, MD had accepted a position with the Richard L. Roudebush Veterans Health Administration Center here in Indianapolis.

Kathryn Rizzo, DO PhD, has accepted a position with Professional Pathology Services in Columbia, South Carolina. ■

MARCIA CULP RETIRES



A Retirement Tea was held for Marcia Culp on June 28 at the IU Health Pathology Laboratory. Marcia has been a secretary in the Histotechnology section since 2004, but has a long history with Indiana University. In 1971, when she started her career in the pathology department, she was still Ms. Davidson. Her 40 years of experience will be missed. ■



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