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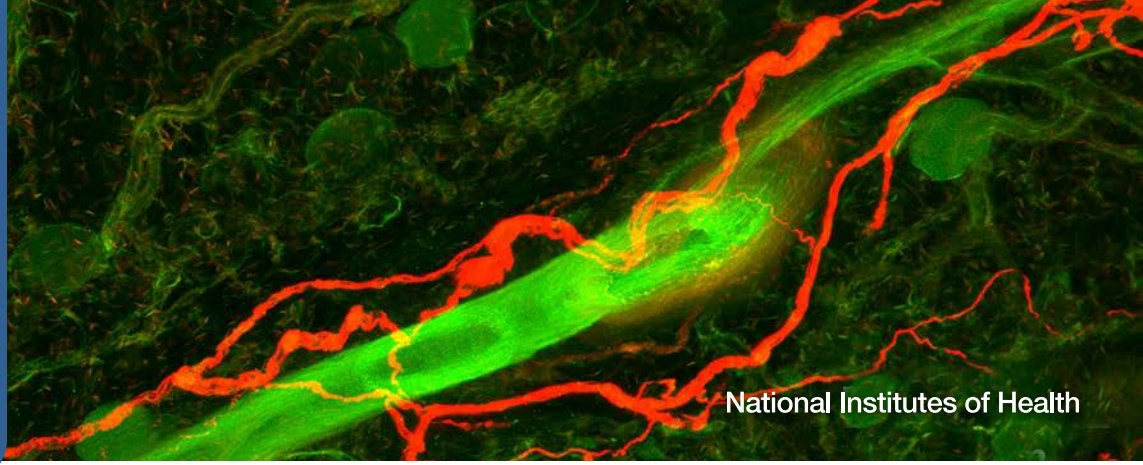

'A NECKLACE OF BREAKTHROUGHS'

NIH Lays Groundwork for Advances in Brain Imaging

BY DANA TALESNIK

Imaging techniques have come a long way. Their increasing sensitivity continues to push the boundaries of what's possible to visualize in disease research, diagnostics and patient care.

It's been nearly two years since Massachusetts General Hospital (MGH) rolled out its Connectome 2—an ultra-high-resolution brain imaging system. Data is now starting to emerge that reveals the power and potential of this technology. The scanner lets scientists and clinicians study the architecture of the human brain where they can see microscopic brain structures with incredible precision.

It's not widely known that developing this scanner involved collaboration with NIH researchers. Underpinning this revolutionary technical feat was decades of research conducted right here on the NIH grounds.

Dr. Peter Basser outside the Clinical Center

"The motivation for building the scanner, the promise of what it could do, was based on 25 years of microstructure imaging research conducted at NIH," said Dr. Peter Basser, senior investigator who now heads the Section on Quantitative Imaging and Tissue Sciences in the Division of Intramural Research in NIH's *Eunice Kennedy Shriver* National Institute on Child Health and Human Development (NICHD).

The research, much of it performed in Basser's lab, enables measurements of quantities like cell size, shape and orientation, among others. Initially, they could measure these features in fixed tissue specimens or in small animals, but clinical magnetic resonance imaging (MRI) scanners were not powerful enough to make these measurements.

"Now, the technology is at the point where we can make those measurements in people."

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The sweetest time of year: gingerbreads, p. 8

IN THIS ISSUE

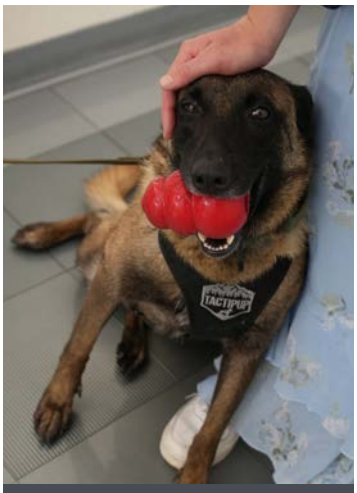
Meet the NIH K9 Police Force

BY AMBER SNYDER

The NIH community is "fur-tunate" to have its very own canine (K9) police unit dedicated to keeping campus safe.

Established in the early 1990s, the program started out with three patrol dogs and has since expanded significantly. The current-day unit comprises 10 K9-officer teams, with nine pairs based on main campus in Bethesda, Md. and one at Rocky Mountain Laboratories in Hamilton, Mont.

The original unit was designed for an open-campus environment, but when main campus was fenced in following 9/11, the K9 program pivoted to focus on explosives detection. The NIH K9s now mainly seek to combat the threat of explosives, firearms and other incendiary devices. On main campus, K9 units split their time between routine inspections and daily training exercises.



K9 Canela relaxes after a search.

For K9 handlers, the work does not end when their shift ends.

"Having a dog means working 24/7," said Sgt. Jose Ayala. His partner, Canela, a five-year-old female Belgian Malinois, spends nearly every waking hour with him; she has a dog bed in his office. NIH police dogs live full-time with their handlers and families and can even co-exist with other pets given the proper introductions.

In a typical day, K9 units work for three to four hours performing

SEE **K9**, PAGE 5

Belkaid to Deliver Paul Lecture Jan. 7

Dr. Yasmine Belkaid of the Institut Pasteur in Paris, France will deliver the annual William E. Paul Lecture as part of the NIH Director's Wednesday Afternoon Lecture Series (WALS). Her talk, titled, "Immune Control of Host Physiology" will take place on Wednesday, January 7 at 2 p.m. E.T. in Bldg. 10's Lipsett Amphitheater and online at videocast.nih.gov.

Dr. Yasmine Belkaid

Belkaid is president of the Institut Pasteur and the head of the Metaorganism laboratory at the Institut Pasteur. Her work explores fundamental mechanisms that regulate tissue homeostasis and host immune responses and uncovered key roles for the microbiota and dietary factors in the control of immunity and protection to pathogens. It also explores the role of the immune system in organismal remodeling and the impact of infections on the mother-child dyad.

Following a postdoctoral fellowship at NIH on immune regulation during infection, Belkaid started her research program at the Children's Hospital Research Foundation in Cincinnati. In 2005, she joined NIH's National Institute of Allergy and Infectious Diseases (NIAID) where she served as department chair of the Laboratory of Host Immunity and Microbiome, Director of the trans-NIH Center for Human Immunology and founder and director of the NIAID Microbiome Program prior to joining the Institut Pasteur in 2024.

Belkaid is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the National Academy of Medicine and she is the recipient of numerous awards including the Lurie Prize in Biomedical Sciences, the Emil von Behring Prize, the Sanofi-Institut Pasteur Award, the Robert Koch Award and the AAI Excellence in Mentoring Award.

The annual Paul lecture was established in 2016 in honor of the late Dr. William E. Paul, who led the NIH immunology community.

For more information or to request reasonable accommodation, email WALSoffice@od.nih.gov.

Santa Returns to the Children's Inn at NIH

Above, Santa and Mrs. Claus visit with kids at the Children's Inn; Santa's motorcycle elves pose together. **PHOTOS: CHILDREN'S INN AT NIH**

Santa Claus and his motor officer "elves" returned to the Children's Inn at NIH on Dec. 10.

The visit was part of the annual Santa Ride conducted by the Montgomery County Police Department. Santa and his elves first stopped by the 5th District Police Station in Germantown to trade their sleigh and reindeer for motorcycles.

Santa and his elves traveled throughout the county on their motorcycles before stopping at the Inn. They visited Poolesville, Damascus, Olney, Silver Spring, Gaithersburg, Rockville, and Bethesda. All along the way, they collected gifts and donations from the local community.

Following the caravan, Santa and the elves stopped by the Inn. There, they spent time with patients and their families and took part in activities, such as stocking and gingerbread house decorating and face painting. Before departing, Santa and the elves rode across campus.

First Scenes of Winter: A Light Snow Falls on Bethesda Campus in December

A light layer of snow fell on campus on Dec. 5 by Bldg. 1 (l) and the Clinical Center. Kudos to the the Office of Research Facilities for swiftly clearing and salting streets, sidewalks, pathways and parking lots. **PHOTOS: ERIC BOCK**

Donate Use-or-Lose Hours to the NIH Leave Bank by Jan. 10

In 2024, NIH employees lost an estimated $6.1 million in annual leave. Don't lose yours! The Leave Bank offers you the opportunity to put that leave to use by donating your use-or-lose annual leave to the bank by Jan. 10, via ITAS. When you donate to the Leave Bank, you help a co-worker in need, like this recipient:

"The Leave Bank made an invaluable contribution to my recovery. Instead of fretting over my job and how to cover expenses, I could focus on my recovery. I am happy to report that I am back at work and doing much better. I will continue to contribute to the Leave Bank every year to show my appreciation for how it positively impacted my life, and by extension, my family's lives."

To donate, log in to ITAS at https://itas.nih.gov. On the tool bar, select "Donate to Leave Bank." Enter the type of leave (annual or restored annual), then the number of hours you wish to donate and select "OK."

More information on the program can be found at bit.ly/3XA6qct. For questions, call (301) 443-8393 or email LeaveBank@od.nih.gov.

CELEBRATING TWO DECADES OF BIOMARKER INNOVATION

NIH's Pivotal Role in the FNIH Biomarkers Consortium

Nearly 20 years ago, the Foundation for the National Institutes of Health (FNIH) launched the Biomarkers Consortium, together with NIH, FDA, the nonprofit PhRMA and other key contributors from the public and private sectors.

From the beginning, NIH's leadership and scientific expertise have been at the heart of the Biomarkers Consortium's progress and have guided the development of biomarker science from promising ideas to regulatory-grade tools and solutions that improve patient care.

The FNIH Biomarkers Consortium has been instrumental in driving innovation and transforming how biomarkers are developed, validated and applied in clinical and regulatory settings. Among the consortium's accomplishments are 35 scientifically validated methods, materials or measures for use in clinical trials and patient care; 26 therapeutics advanced based on the tools generated; support for 10 FDA guidance documents and more than 200 publications.

In February, FNIH will host a symposium celebrating 20 years of biomarker innovation and impact—highlighting groundbreaking achievements and cultivating new cross-sector collaborations for the future.

Keynote speakers will discuss the role of biomarkers from the perspectives of government regulators, drug developers and patients in need of better outcomes.

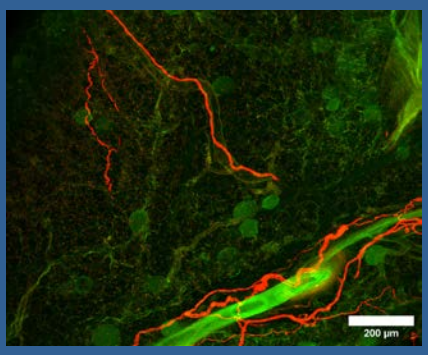
- Dr. Janet Woodcock, former principal deputy commissioner, FDA, will reflect on the evolution and promise of biomarkers in transforming drug development and clinical care. She will explore how biomarkers enable more precise, patient-centered approaches to treatment, support regulatory decision-making, and foster innovation across therapeutic areas.
- Dr. Eliav Barr, senior vice president, head of global clinical development, and chief medical officer at Merck, will discuss what's next in biomarker science: How do we ensure biomarker discovery keeps pace with therapeutic innovation? What new frontiers—scientific, technical and ethical—must we navigate to realize the full promise of precision medicine? And how can the field work collectively to accelerate validation, standardization and equitable implementation?
- Dr. David Fajgenbaum, co-founder and president of Every Cure, will share his inspiring journey going from a healthy third-year medical student to a critically ill patient diagnosed with a rare and deadly disease, before discovering a drug that saved his life. This talk will illustrate the power of biomarkers not only to guide precision medicine, but also to unlock hidden cures for patients in need.

From l, Dr. Janet Woodcock, Dr. Eliav Barr and Dr. David Fajgenbaum

The two-day agenda will also feature panel sessions exploring development of reasonably likely surrogate endpoints, the future of epigenomic and blood-based biomarkers, and the application of artificial intelligence to clinical imaging and pathology data—all with NIH colleagues providing expertise and perspective.

The Biomarkers Consortium Symposium will be held February 9-10, 2026. Due to limited in-person seating, all NIH'ers are welcome to attend via videocast, with opportunities to pose questions virtually. See the full agenda and updated information at: bit.ly/3K97cde.

To watch the videocast, see Day 1: https://videocast.nih.gov/watch=57168 and Day 2: https://videocast.nih.gov/watch=57169.



ON THE COVER: *Nerves and vasculature of a rat's knee*

IMAGE: JANAK GAIRE / LAB OF KYLE ALLEN, UNIVERSITY OF FLORIDA - COURTESY OF NIAMS

The NIH Record

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National Institutes of Health
Turning Discovery Into Health

In NIH's Nuclear Magnetic Resonance facility (NMRF), there are powerful scanners such as this 7-tesla MRI system on which microstructure imaging applications can be performed. Several novel MRI techniques developed at NIH helped lay the groundwork for, and helped "de-risk" development of, the new Connectome 2.0 MRI scanner at MGH.

PHOTOS: DANA TALESNIK

Imaging

CONTINUED FROM PAGE 1

Moving the dial

The latest imaging analysis tools developed by Basser and colleagues—incorporated into the Connectome 2—can produce quantitative imaging biomarkers sensitive to different biological features, structures and processes.

The technology offers a radiologist more "stains" and "contrasts" to be able to see distinct features; it allows an oncologist to more easily distinguish cancer from normal tissue; it allows neuroscientists to more clearly see connections in the brain. Beyond the brain, there are many other possible applications, from cardiac muscle imaging to soft tissue studies.

In the early years, Basser recounted, other scientists doubted the future utility of microstructure imaging research. Also, it took time for the imaging technology to catch up to the modeling approaches they now use. But it turned out, with the right equipment, this technology allows researchers to see structures in the nervous system and other parts of the body that they couldn't see before.

"That's what NIH's Intramural Research Program [IRP] is all about," Basser said. "We take risks. We can try things here that are not guaranteed to work, but if they do, they can 'move the dial.'"

A natural marriage

For the past few decades, NIH de-risked the basic imaging science and moved the microstructure imaging research to the point where it could be clinically translated. Enter MGH Martinos Center—eager to migrate the software and methodologies of microstructure imaging for use in the clinic. MGH had the technology and connections with manufacturers to develop the Connectome 2 and sought to incorporate the MRI methods that NIH developed.

MGH invited NIH to collaborate. Together, they applied for an NIH BRAIN Initiative® grant to build a scanner that ultimately could be used with patients in approved clinical trials. It was a truly symbiotic relationship.

"It's a perfect example of what the NIH IRP does well—behind-the-scenes research that underpins important technical and clinical developments," Basser said. "It was a natural marriage between our group and theirs—between intramural and extramural."

Basser added, "I wish more people recognized that when they receive a therapy that makes them better, or when they take a diagnostic test that helps doctors better understand what condition they may have, it didn't just happen by itself. There was an infrastructure—an entire ecosystem producing these technologies."

Precursors to the Connectome

Before starting his own bioengineering lab at NIH, Dr. Carlo Pierpaoli worked with Basser to develop diffusion tensor imaging (DTI), an MRI technique that tracks the direction of water molecules to map the brain's white matter. The Connectome 2 is a next-generation system that can identify features and structures that DTI can't detect.

But in those earlier days, "Carlo was probably the one most responsible for translating DTI from bench to bedside, from our early experiments with fixed tissue to imaging in the clinic," said Basser.

Other MRI advances developed in Basser's lab include a tracking method that creates a "wiring diagram" of white matter connections in the brain; ways to identify brain cortical folds, areas and layers; and imaging approaches to acquire key neuro-anatomical and histological information.

A foundation built on investments

The development of MRI technology dates back to the 1920s, when physicists Stern and Gerlach identified magnetic properties of nuclear spins. Every decade since, scientific breakthroughs in nuclear processes led to the development of MRI.

"Things we're doing now are based on investments made literally 100 years ago and developments that resulted in numerous Nobel Prizes along the way," Basser said.

Along the way, basic science becomes the new technology.

"The connection is very obvious in the MRI field," he said, "because you can easily see how one breakthrough led to another and another, bringing us to where we are now. It's basically a whole necklace of breakthroughs."

Steadfast research, vast potential

Basser has been an investigator at NIH for nearly 40 years. He's grateful for the resources and support of NIH's IRP.

"Given my profile as a scientist-inventor, the NIH IRP was a good fit for me because I could try things here—DTI for example, that took 10 years to elicit interest in the radiology field—and advance them to the point where companies considered licensing the technology from NIH."

That's one feature that makes NIH so special. There's a long lead time in instrumentation development—design, testing, licensing and regulatory approval. "It would've been difficult to keep a lab [anywhere else] funded before these methods became widely used."

The contributions of Basser and collaborators and the potential of these ever-sharpening technologies are vast. Basser is proud of the steadfast research that enabled these capabilities with the promise to transform patient care.

"Our scanning techniques are used everywhere," he said. They're improving diagnosis and outcomes. "It's beholden to us [at NIH] to advocate for ourselves and tell the public how we're improving their lives. Hopefully, we are doing this better now!"

K9

CONTINUED FROM PAGE 1

routine inspections. To keep the dogs fresh, they spend about 30 minutes working and then rest for 30 minutes. The handlers direct the dogs to carefully inspect vehicles that come through inspection locations—everything from lab supply deliveries to food trucks. The dogs sort through a huge array of distracting scents, like food or roadkill, to detect trace incendiary materials. On a typical day, one team will inspect between 60 and 100 vehicles.

The most common items canine teams find are firearms, said Ayala. Because NIH is considered federal property, visitors must comply with the rules that apply to federal facilities (which prohibit firearms), rather than wherever they are traveling from.

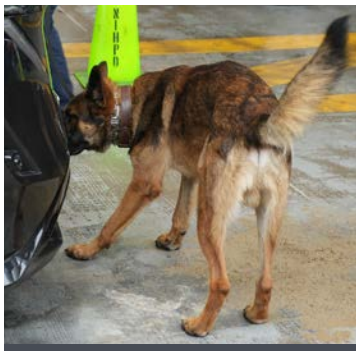
Ayala personally selects all police canines that come to work at NIH. The dogs, which are typically German Shepherds, Belgian Malinois or a mixture of one or both breeds, are bred in Europe and then travel to a vendor facility in North Carolina where they receive initial training. Once Ayala has selected the dogs, they go through an additional 15 weeks of training: 12 weeks in explosives detection (ED), and three more weeks with their new NIH canine officer.

New K9 handlers are typically sourced from within NIH's own police department, Ayala said. "Effective verbal and non-verbal communication skills are essential for working as a team ... [and] understanding canine behavior is crucial for interpreting subtle cues from the dog."

The dogs will sit and stare once they have pinpointed a scent, but the tracking process can be complicated. Scent may travel and pool in various ways depending on environmental conditions. Air flow, interstitial spaces and other building quirks can make a scent flow differently, said Ayala, and handlers must be able to adjust for these factors. Regular training exercises—at least four hours per week—ensure the canine teams are at the top of their game.

"It's teamwork, not a metal detector," said Ayala. He and several canine teams demonstrated this teamwork recently in a series of training exercises at the Commercial Vehicle Inspection Facility (CVIF), conducting vehicle searches and an indoor search. The dogs sniffed along the line of incoming traffic and then moved onto a training exercise set up by Ayala, where they had to detect a training aid under the hood of a parked car. In the final trial, the dogs inspected the central hallway of the CVIF to find another training aid.

Each canine team has their own methods for searching. Two intensely focused young Belgian Malinois, Jaco and Turbo, searched vehicles almost independently. Rocko, a black Dutch Shepherd/Belgian Malinois mix who partnered with Master Police Officer Alvin Maker, preferred more frequent verbal directions from his handler.

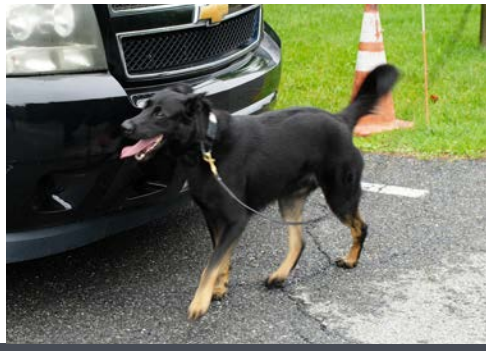


Above, Jaco searches a car at the CVIF. Below, he hugs his handler Cpl. McPartland.

Turbo, one of the newest dogs on the unit handled by Corporal Fady Zaki, was still learning to navigate the slippery floor inside the CVIF, so Ayala conducted the final indoor search with his own petite "mini-Mal" Canela.

All four dogs had a brief play session with a sturdy toy after a successful search. Rocko particularly enjoyed exuberant verbal praise, while Jaco showed his excitement by standing on his hind legs to "hug" his partner, Corporal Alexander McPartland.

Ayala is looking to add more dogs to the unit, citing increased construction traffic at another NIH campus requiring a K9 team's presence there. Facility expansions are also in the works on main campus. These changes will benefit both the K9 unit and the greater NIH community, Ayala said. "We work diligently to keep our community safe, ensuring everyone can be secure knowing their safety is our top priority."



From l, Sgt. Jose Ayala and his partner, Canela; Turbo alerts to a training aid in a parked vehicle; Rocko inspects a vehicle. **PHOTOS: ERIC BOCK**

Dr. Helene Langevin

NCCIH's Langevin Retires

Dr. Helene M. Langevin, director of NIH's National Center for Complementary and Integrative Health (NCCIH), retired from federal service on November 30.

Since taking the role in 2018, she spearheaded the concept of whole person health at NCCIH, focusing on integration across physiological systems and positive health processes, such as resilience and health restoration.

As NCCIH director, Langevin led several NIH-wide initiatives that placed whole person health at the forefront of NIH's emerging unified strategy to address the burden of chronic disease in the United States. This includes the recent funding of the Whole Person Reference Physiome and Coordination Center, led by NCCIH and co-funded by 20 NIH institutes, centers and offices to create a cross-system network map of healthy physiological function. In collaboration with the CDC National Center for Health Statistics, Langevin steered the development of the Whole Person Health Index, which is currently being deployed in the National Health Interview Survey and the NIH *All of Us* Research Program's longitudinal cohort.

During her tenure, Langevin co-led the CARE for Health™ initiative and the NIH Pragmatic Trials Collaboratory to create a learning health system, embedding pragmatic research into health care settings to accelerate the implementation of research findings into clinical practice. Together with leadership from NIH's Office of Nutrition Research, Office of Dietary Supplements and National Institute of Nursing Research, she defined the Nutrition Continuum, spanning across biological, behavioral, social and environmental domains and linking nutrition research across NIH.

In addition, Langevin served as chair of the Interagency Pain Research Coordinating Committee, co-chair of the Helping to End Addiction Long-term® Initiative (NIH HEAL Initiative®), co-chair of the Bridge to Artificial Intelligence (Bridge2AI) program, and chair of the Research Services Working Group. She also served as an adjunct investigator at NIH's National Institute of Dental and Craniofacial Research connective tissue section, where her research interests have focused on the role of connective tissue and mechano-biology in inflammation and cancer.

Prior to coming to NIH, Langevin was director of the Osher Center for Integrative Medicine, jointly based at Brigham and Women's Hospital and Harvard Medical School, and professor-in-residence of medicine at Harvard Medical School from 2012 to 2018. She was also a professor of neurological sciences at the University of Vermont Larner College of Medicine.

She received an M.D. from McGill University and trained in internal medicine, endocrinology, and metabolism at Johns Hopkins Hospital. She is a fellow of the American College of Physicians.

Upon leaving NIH, Langevin will rejoin the University of Vermont to help build a research program at the UVM Osher Center for Integrative Health. She will also serve in an advisory role at the Academic Consortium for Integrative Medicine and Health.

"It was the honor of a lifetime for me to lead NCCIH for the past seven years," she reflected. "I am especially proud of the many NIH-wide initiatives led by NCCIH on positive health processes, multisystem integration and whole person health. I look forward to continuing to promote research excellence in these transformational areas in my new roles at the University of Vermont and the Academic Consortium for Integrative Medicine and Health."

NCCIH Deputy Director Dr. David Shurtleff will serve as acting director while a search is conducted for the position.

NIH Remembers Becker

Dr. Ted Becker, one of the first physical chemists at NIH, recently passed away shortly after his 95th birthday. With his passing, the magnetic resonance imaging (MRI) community lost a passionate leader and supporter who dedicated much of his career to helping others.

Dr. Edwin "Ted" Becker

Becker received his Ph.D. in chemistry from UC Berkeley in 1955. Although recruited by major companies, he chose to work at NIH, where he believed his work would have the most impact.

Becker's research initially focused on Raman spectroscopy. He switched his focus to Nuclear Magnetic Resonance (NMR) when the first commercial instrumentation became available in the late 1950s. His research covered a broad area, ranging from methods development for enhancing

Colleagues honor Langevin at a recent retirement gathering at NIH.

Then-FAES president Becker (r) with Dr. Krishna "Balki" Balakrishnan (l), former FAES executive director

sensitivity of Fourier transform NMR to the study of hydrogen bonding, molecular self-assembly, and hemoglobin gelation kinetics related to sickle cell disease.

In 1980, Becker switched to the administrative side, taking on the huge task of facilitating research as NIH associate director for research services. In that role, his responsibilities encompassed much of the day-by-day operations, including building management, security and procurement. He succeeded in dramatically reducing the paperwork required for small purchases, a change that positively impacted the entire NIH research community.

In the early 1980s, Becker foresaw the profound impact that NMR technology would have on medicine. At a time when MRI and Magnetic Resonance Spectroscopy (MRS) were still emerging techniques, he recognized their potential for non-invasive diagnosis and research.

The NIH campus was already home to exceptional scientific expertise. Yet the hurdles were formidable: the technology was expensive, and the powerful magnets used in MRI demanded large, dedicated spaces.

Rather than let these obstacles deter progress, Becker envisioned a cooperative solution. He proposed creating a centralized NMR research center that would serve the needs of multiple institutes for access to emerging MRI/MRS techniques.

Through his efforts, a new facility was constructed adjacent to the Clinical Center, housing two bays—one with a 1.5 Tesla MRI system for human research and another reserved for hardware development and future technologies. In addition, two other MRIs for animal experimentation were included.

Becker also developed an innovative funding model to ensure the NMR Center's long-term viability. A steering committee with representatives from all contributing Institutes oversaw scheduling, operations and strategic direction. The NMR Center eventually expanded to include nine human-scale MRI scanners ranging in field strength and a state-of-the-art mouse imaging facility.

More than 30 groups use the human MRIs and over 100 protocols are active in the animal imaging facility from almost every NIH institute. Becker's approach laid the foundation for the NIH-wide collaboration model that continues to guide shared resources to this day. His framework became the basis for the NIH Shared Resources Subcommittee (SRS) of the scientific directors, which now oversees 17 shared resources with over $25 million annually invested in a variety of cooperative research efforts.

Front (from l): Becker. Dr. Adriaan Bax, Dr. Alex Pines; Back (l to r): Dr. Rod Wasylishen, Dr. Dennis Torchia, Dr. Rigitze Vold and Dr. Thomas Farrar

Becker posing with a model of the first Varian A60 NMR spectrometer

PHOTO COURTESY: CARL BECKER

Becker devoted most of his life to helping his scientific colleagues at NIH, in the worldwide magnetic resonance community, and beyond in the international chemistry community. For two years, he served as acting director of the Fogarty International Center, and as associate director for international research from 1979-1981. Beyond NIH, he chaired the International Activities Committee of the American Chemical Society from 1993-95, and he took on the role of secretary-general of the International Union of Pure and Applied Chemistry (IUPAC).

Becker published more than 100 papers in the area of molecular spectroscopy and nuclear magnetic resonance. He authored two popular NMR textbooks and was the principal editor for Volume 1 of an NMR encyclopedia that contains a treasure of personal perspectives on the early stages of magnetic resonance.

Becker loved teaching the next generations of scientists, and for nearly 40 years he taught physical chemistry at Georgetown University and the Foundation for Advanced Education in the Sciences (FAES) Graduate School at NIH. He also received numerous national recognitions for his work.

Becker loved and breathed scientific research, magnetic resonance in particular. The entire NIH community continues to benefit from the work he carried out so selflessly to help others. **—Robert Balaban, Ad Bax, Alan Koretsky, Robert Tycko**

NIH Fellow Gets Certified in Genetics, Genomics

Congratulations to Dr. Rabia Faridi of NIH's National Institute of Deafness and other Communication Disorders (NIDCD) who recently passed the American Board of Medical Genetics and Genomics (ABMGG) certification exam and is now a diplomate of ABMGG.

Dr. Rabia Faridi

Faridi is a research fellow at NIDCD investigating the genetic causes of hearing loss. She previously completed a laboratory genetics and genomics fellowship at NIH's National Human Genome Research Institute (NHGRI). She holds a doctor of pharmacy and a master's degree and Ph.D. in molecular biology from the University of the Punjab in Pakistan.

ABMGG is responsible for accrediting and certifying clinical laboratory geneticists, clinical geneticists, medical biochemical geneticists and medical genomic specialists. It is recognized globally as the gold standard in the field and awarded to professionals who exhibit superior skill in directing and interpreting clinical genetics and genomics tests in the U.S. and abroad. The organization also ensures that professionals practicing in medical genetics and genomics meet rigorous standards of training, competence and ethical practice.

At l, the overall winner: "A Night on RT Street"; above, the winning team, the CC's Respiratory Therapy program, with CC acting CEO Pius Aiyelawo (r); top r, NIDDK Clinical Core and Mass Spec Lab's "Operation" and, r, NCI Immunotherapy Surgery Branch's "The Night Before TIL"

SWEET TRADITION

Gingerbread Houses Spread Joy Across NIH

PHOTOS: DANA TALESNIK

Every December, NIH's much-anticipated gingerbread house decorating contest brings holiday cheer to staff, patients and visitors alike. This year, a record-setting 92 NIH teams submitted creative confections, which will remain on display in the Clinical Center atrium through Jan. 5.

Some creations reflected pop culture, from *Wicked* to K-Pop Demon Hunters to plush monster dolls called Labubu. A few teams took innovative takes on classic games such as Monopoly, Candyland and Operation with a scientific twist. Others built houses showcasing their lab's work.

"Each gingerbread house brought a unique story, a burst of imagination and a little bit of holiday magic to our hospital," said CC acting CEO Pius Aiyelawo. "Departments from across NIH came together with remarkable spirit to build these beautiful creations...They bring smiles to patients and families who may be spending their holidays here with us. And most importantly, they remind us of the heart, creativity and humanity that define this hospital."

Contestants were grateful to the Foundation for the NIH (FNIH) for donating the kits. NIH's Recreation & Welfare Association (R&W) and the Foundation for Advanced Education in the Sciences (FAES) contributed the gift cards to contest winners.

See all of this year's contestants on the CC's Facebook page: https://bit.ly/4pZ4zut.

At l, the CC's hospital epidemiology and biostatistics and clinical epidemiology service took second place with "Labubu Winter Olympics." At r, "Wickedly Infectious" by NIAID's division of microbiology and infectious diseases came in third.

The Kids Choice winners were all snowy scenes. From l, "Festival of Lights" by NICHD's section on translational biophotonics; "Code Labu BLUE" by the CC's 3SWS and "Snow Day at NIH" by the CC Central Hospital Supply