



2004-2005
YEAR IN REVIEW

BLUEPRINTS

for a Life in Discovery

ROSALIND FRANKLIN UNIVERSITY
OF MEDICINE AND SCIENCE



“

The real voyage of discovery consists
not in seeing new landscapes but in
having new eyes.

—MARCEL PROUST

”

At Rosalind Franklin University of Medicine and Science, we know that where we have been is often just as important as where we are headed. History informs the future. Innovation arises from inspiration. Achievement owes a debt of gratitude to the planning and effort that preceded it.

With that in mind, we bring to you a rare glimpse into the myriad ways that ideas have become reality – strategies have become success stories – at Rosalind Franklin University. *Blueprints for a Life in Discovery* is a chronicle of the history upon which we build, and the planning process that creates opportunities. It is also a detailed account of our accomplishments in 2004-2005, and a preview of our plans for the future.

Join us in exploring where we have been and celebrating where we are headed.

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Rosalind Franklin had an idea about the blueprint for life – about the structure of the B form of DNA and its far-reaching implications. She worked tirelessly to capture that idea on film, and she called it “Photograph 51.” With her discovery, she changed our world.

At Rosalind Franklin University, *we* had an idea about how to create a world-class institution for the education of health professionals and biomedical scientists. We worked tirelessly to capture that idea in a thoughtful strategy for the future, and we call it “Life in Discovery.” With our dedication, and with Rosalind Franklin’s legacy to guide us, we’re changing *your* world.

it all began with an idea...

“

There is one thing stronger than all the armies in the world, and that is an idea whose time has come.

—VICTOR HUGO

”



On behalf of all of us at Rosalind Franklin University of Medicine and Science, we welcome you to explore the inspiring results of the plan that emanated from the idea. Within the pages of this report, you will discover people and accomplishments that exemplify all that is great about this University. You will see actual University planning documents, architectural blueprints, and notes that led to scientific discoveries. And throughout this *Year in Review*, you will see Rosalind Franklin's own handwriting. By sharing these most personal of artifacts, we invite you to witness all that makes the achievements of our students, faculty, and alumni possible. We trust you will find these stories moving, and a true testament to the support we receive from you – our alumni, students, faculty, staff, trustees, friends, and parents. We thank you.

A handwritten signature in black ink that reads "Ruth M. Rothstein". The script is fluid and cursive.

Ruth M. Rothstein
Chair, Board of Trustees

A handwritten signature in black ink that reads "K. Michael Welch". The script is fluid and cursive.

K. Michael Welch, MB, ChB, FRCP
President and CEO



What a difference a year makes. Since the publication of our last *Year in Review*, we have moved swiftly from inspiration, to planning, to completion on countless, significant projects. We conducted an extensive curriculum review at Chicago Medical School, established an Office for Student Development, and rearticulated a strong Board of Trustees to lead us into the future. We have brought to life our ongoing commitment to curricular innovation and interprofessional education through the integration of pathology and pathologists' assistant programs, the launch of an entry-level Master of Science in clinical laboratory sciences, the establishment of an Interprofessional Healthcare Studies Department, and the opening of programs in Women's Health.

This year also gave rise to an Office for Educational Technology, and the naming of Chief Information Officer Dr. Melanie Shuran, a faculty leader whose understanding of the technological needs of faculty and students is current and keen. It was a year of new beginnings – such as the launch of a rigorous DPM/PhD program. It was a year of continuous growth – as evidenced by our expanded partnership with the North Chicago VA Medical Center's podiatric medical and surgical units, and the continued development of the Diabetes Institute, under the direction of Dr. Ji-Won Yoon.

Keep turning the pages to see – through words and photographs – how inspiration led to strategy, and how strategy became success.

life in discovery: inspiration,
preparation, implementation



“

Ideas won't keep. Something must be done about them.

—ALFRED NORTH WHITEHEAD

”



Coffee in the Laboratory. American Society for Microbiology Archive and Rachel Glaeser.



“

Rosalind [Franklin] had in a very high degree the talents, the mental capacities, the kind of intelligence, which lend themselves happily to science: they are the ones which embrace a gift for logic, an endless and very specific curiosity, and the ability to take enormous and positive pleasure in the workings of reason.

—ANNE SAYRE

”

Rosalind Franklin University has a proud history of excellence in leadership, academics, and community service. Each year finds us honored to uphold and build upon these traditions.

- The recruitment of Drs. Cathy Lazarus and John Tomkowiak, and the appointment of existing faculty members Drs. Kenneth Neet, Sandra Salloway and Patrick Knott to new leadership positions has led to fresh innovations in student affairs and curriculum.
- The formation of a Council of Deans affords the deans of the University's four colleges greater control over the academic structure and function of their programs. To that end, each dean is now the Chief Academic Officer of his or her own college.
- This year, interprofessional groups of students banded together for tsunami relief, collecting donations of money, clothing, and other items needed by victims of the disaster in southeast Asia. In fact, community service is no longer just extracurricular — it is a required component of the MTD 500 Interprofessional Healthcare Studies Course.

- Each year, the Scholl Student Scholarship Benefit provides unique and fun opportunities to raise financial support for podiatry students. This year, it was a silent auction; next up: casino night. Likewise, the Feet First Exhibition at Scholl College has evolved from a museum solely about feet into a venue for public cultural events, including art shows and displays detailing the history of medicine.

The values and traditions instilled by our predecessors are both evidence of our past success, and inspiration for today and tomorrow.



the thoughtful evolution
of time-honored traditions

“

Education is not preparation for life;
education is life itself.

—JOHN DEWEY

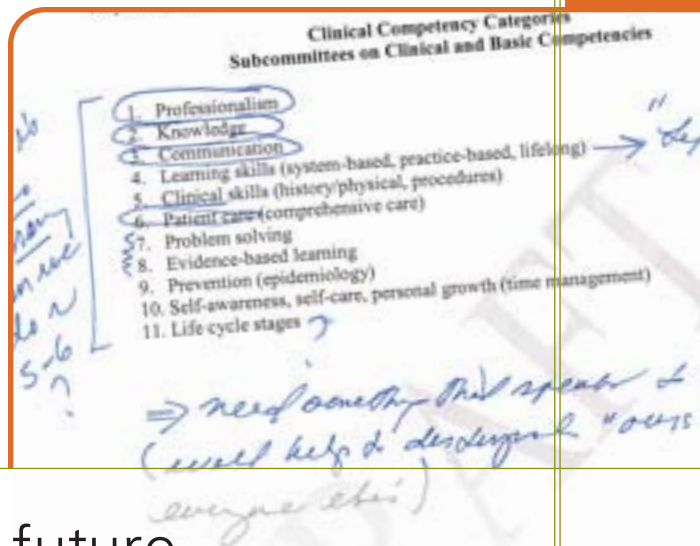
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Today's students at Rosalind Franklin University are tomorrow's healthcare providers and biomedical scientists. They honor the legacy of Dr. Rosalind Franklin by committing themselves to education, research, clinical practice, and community service, and carrying that commitment forward to make a better future. Students prepare to meet this future in many ways; Chicago Medical School students master core competencies including medical and scientific knowledge, patient care, professionalism, and communication skills – touchstones of excellence that mark steps along a path of lifelong learning.

Other milestones along that journey include white coat ceremonies for medical, podiatric medical, and health professions students, held during the early years of their education, and Match Day, when fourth-year CMS and Scholl students find out which residency program they will be joining to continue their training. Several students participated in research projects and published their studies in prestigious medical and scientific journals. Still others received awards and accolades, too numerous to list here, for their work in laboratories and clinical rotations.

Not all preparation for the future is purely academic, though. Several student organizations sponsor fundraisers and clothing drives to aid those in need – both at home and abroad. This year, the National Medical Women's Association raised money to benefit the National Ovarian Cancer Coalition; a donation was made in memory of Dr. Rosalind Franklin, who died from ovarian cancer in 1958.

Rosalind Franklin University students possess the same passion and fervor that drove their University's namesake; by honoring her in all that they do, they prepare themselves today to impact the future in ways that will benefit us all.



our students, our future

From the first day students set foot on campus, they are taught to think as members of a healthcare team. Students from multiple disciplines work side by side in classrooms, laboratories, and exam rooms to acquire the knowledge and develop the skills necessary to collaborate with other members of the healthcare team. The University has adopted a collaborative care model that outlines eight essential components to optimizing patient outcomes via team-based health care: cooperation, communication, collegiality, consensus, coordination, clinical competence, cultural sensitivity, and a common goal. This year, the common goal of students in the Interprofessional Healthcare Teams Course is managing the care of a diabetic patient, Bayani M. (Bayani is Filipino for “hope”). And in the Education and Evaluation Center, a high fidelity emergency care simulator (ECS) models normal and abnormal human physiology and allows for management of complicated conditions, such as cardiac arrest or respiratory failure. The ECS, affectionately nicknamed “Francis,” provides students from all programs an opportunity to develop both the practical and teamwork skills vital to accurate patient assessment in real-life medical situations.

Interprofessional
spirit pervades
every part of
life at Rosalind
Franklin
University –
our students,
our curriculum,
and our service.



the spirit of interprofessionalism





“

Interprofessional practice, which results most successfully from interprofessional education, is the delivery of care by a team of health professionals who work side by side with one goal: to improve the health of the patients they serve.

—NABIH M. RAMADAN, MD

”



“

The possession of facts is knowledge;
the use of them is wisdom.

—THOMAS JEFFERSON

”

Clinical care at Rosalind Franklin University combines compassionate interaction with state-of-the-art science. At home in our renovated Clinics, we're offering new services — like physical therapy, neuropsychology, acupuncture, gastroenterology, and bone density screening — and utilizing novel training facilities, like a mock OR and the Dr. Harold and Selma Feder Biomechanics and Orthopedic Sciences Instructional Center. A surgical suite brings a new level of care to our campus, and faculty leaders who led the charge in interprofessional education are developing a collaborative care model for our Clinics.

RFUMS is advancing health care through clinical research in diabetes, migraine, anxiety, and podiatric medicine. Several clinical projects are ongoing and many will soon start, and Scholl's Center for Lower Extremity Ambulatory Research (CLEAR) is a renowned research group of its kind. CLEAR has formed a relationship with Advocate Medical Group for wound care, and future clerkships at Lutheran General will provide learning opportunities in wound healing and limb salvage. In addition to advancing health care through research and clinical practice, we continue to enhance clinical education at the Clinics and provide continuing medical education in fields such as internal medicine, neurology, podiatry and psychiatry.

advancing health care, one patient
and one discovery at a time

The Clinics at Rosalind Franklin University

3471 Green Bay Rd.
North Chicago, Ill. 60064

Ref:	Jane Fremer	Facility ID:	Sara M. Graves, MD
Date:	September 23, 1998	Physician:	7/19/2005 4:17:30 PM (8.70)
ht / Weight:	5' 8" 143 lb.	Measured:	7/19/2005 4:25:12 PM (8.70)
Ethnic:	Female White	Analyzed:	
AP Spine Bone Density		BMD (g/cm ³)	
		1.42	Reference: L1-L4
		1.30	

Community – a place where people live, work, learn, and achieve. Nothing revitalizes a community like new things – new places to contribute and discover, new people to meet.

This year saw many new and innovative additions to our campus community. A state-of-the-art research wing was planned, built and opened for active research. Academic programs shifted from traditional, paper-based classes to more automated, paperless methods of learning. Wireless Internet connection in the library has made studying more comfortable, and e-mail kiosks in the Student Union make it even more convenient for students to grab a bite to eat, relax with friends, and check their messages – all from one location.

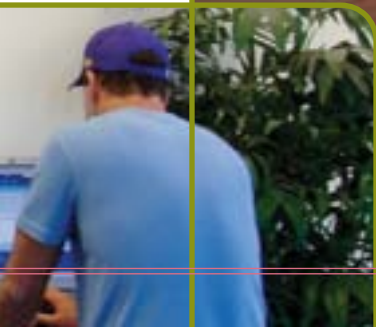
The spirit of community at Rosalind Franklin University does not end at the property line. A joint research symposium with our neighbors at the North Chicago Veterans Affairs Medical Center (NCVAMC) fostered new and exciting opportunities for collaboration and partnership, and brought together scientists from RFUMS, NCVAMC, Hines VA Medical Center, Naval Hospital Great Lakes, and the Naval Institute for Dental and Biomedical Research. And in addition to collecting money and supplies for victims of Hurricane Katrina, the University community increased its numbers by 18 when it welcomed to campus a family displaced by the hurricane, giving them temporary shelter in a home furnished with materials donated by faculty, staff and students.



our campus community

14/15

ROSALIND FRANKLIN UNIVERSITY
OF MEDICINE AND SCIENCE





“

Joy can be real only if people look on their life as a service, and have a definite object in life outside themselves and their personal happiness.

—LEO TOLSTOY

”

How do you quantify the impact of countless hours dedicated to the service of others? You can't. The impact touches one person, then a group, then into a community and beyond, until it becomes immeasurable. Though we may never truly know the magnitude of the service provided by the University, we know it exists. Health improves. Minds are broadened. Lives are changed for the better.

Community service was stronger than ever during this past year. The Kids 1st Health Fair provided necessary immunizations and school physicals to record numbers of children. The Healthy Families Clinic helped families in Lake County discover new approaches to better health – together. This year's first-ever Mini Medical School offered members of the lay public a chance to become "students" and learn how to be the best advocates for their own health.

Outreach is such a vital part of life at Rosalind Franklin University that a community service component is now an integral part of the curriculum.

Students aren't just taught about serving others – they're learning by doing.

They're taking the competencies and compassion they have mastered in classrooms and exam rooms out into surrounding communities and creating their own impact, enriching the lives of those in need.

16/17

ROSALIND FRANKLIN UNIVERSITY
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creating impact, improving lives

All research is based on careful planning. The scientific method gives researchers a clear path to follow, from positing a hypothesis to unveiling new discoveries that help people lead healthier lives. Like the research conducted by Dr. Bala Chandran, Professor and Chair of Microbiology and Immunology, in the H. M. Bligh Cancer Research Laboratories, which brings new hope to cancer patients for better treatments and possible cures. Or the breakthroughs in structural biology, led by Drs. Ken Neet, Ronald Kaplan, Marc Glucksman, and other members of the Department of Biochemistry and Molecular Biology, that help us better understand how DNA and proteins influence health and human development. Or the rapid advances made by Drs. Marina Wolf, John Burns, Gloria Meredith, and Anthony West that provide insight into complex neurological problems such as Parkinson's disease, neurogenesis, acute pain management, and addiction.



The path to discovery is sometimes an investigation of pathways themselves, like the epithelial ion transport work being done by Dr. Robert Bridges, Professor and Chair of Physiology and Biophysics, with an eye toward treatment of Cystic Fibrosis and COPD. The cutting-edge research of Dr. David Armstrong and colleagues at Scholl College's Center for Lower Extremity Ambulatory Research (CLEAR) is paving the way to a revolution in diabetic wound care, saving the lives and limbs of diabetic patients at ever-increasing rates.

These scientists, and many others like them, are giving back health and hope – the ultimate destination of discovery.



Robert J. Bridges, PhD, Professor and Chair, Physiology and Biophysics



Bala Chandran, PhD, Professor and Chair, Microbiology and Immunology

A photograph of four students in a laboratory setting. They are all wearing white lab coats and are focused on looking through microscopes. The students are diverse in age and ethnicity. The background is a plain, light-colored wall.

“ Always bear in mind that your own resolution to succeed is more important than any other one thing.

—ABRAHAM LINCOLN

”

Faculty and students at Rosalind Franklin University don't just strive for excellence – they achieve it. These accomplishments vary in size and scope, and create the foundation for future achievements. The following are a few highlights from an incredibly successful year.

- The Liaison Committee on Medical Education (LCME) restored full accreditation to the Chicago Medical School, recognizing its efforts in curricular innovations, competency-based education, and reducing student debt.
- The addition of expert practitioners and scientists – such as renowned podiatrists Drs. Vickie Driver and James Wrobel, and esteemed researchers Drs. Robert Bridges

and Bala Chandran – illustrates our commitment to recruiting top researchers and faculty.

- We continue to receive international recognition through research awards, professional honors, and media accolades. This year, we were particularly gratified by Dr. Terence Albright's receipt of the American Podiatric Medical Association's Distinguished Service Citation; publications in prestigious journals like *JAMA*, *Lancet* and *Nature Biotechnology* authored by Drs. Frederick Sierles, John Woodard, David Armstrong, and Ji-Won Yoon; and federal funding for innovative programs, like the Psychology and Physician Assistant departments' Healthy Families initiative.

measures of our success



Throughout the past year, we saw ideas and plans come to life in inspiring and life-changing ways. Our planning — for the future of the University, for the future careers of our students, and for the future of health care — goes on. Next year, we will update you on the expansion of the Diabetes Institute, enhanced clinical teaching relationships, and the development of new degree programs like an Interdisciplinary Graduate Program in Biomedical Sciences. We will tell you about our ongoing focus on educational technologies — from the full integration of the online curriculum we developed this year to new initiatives, like automated audience response systems in our classrooms.

This year, we drew the blueprint for an ambitious future. We formed an alumni board for the College of Health Professions and continue to introduce new alumni initiatives like our mentorship program, which connects students to alumni role models. We launched a Clean Air initiative on campus that, with regular wellness fairs and clinics, is making Rosalind Franklin University not just a place to learn about health, but a healthy place to learn.

Our discovery continues...

Vision Statement

The College will be recognized as America's leading center for the development of productive physicians, curriculum innovation, the discovery and dissemination of knowledge in lower intensity health and the provision of access to health professions education and research.

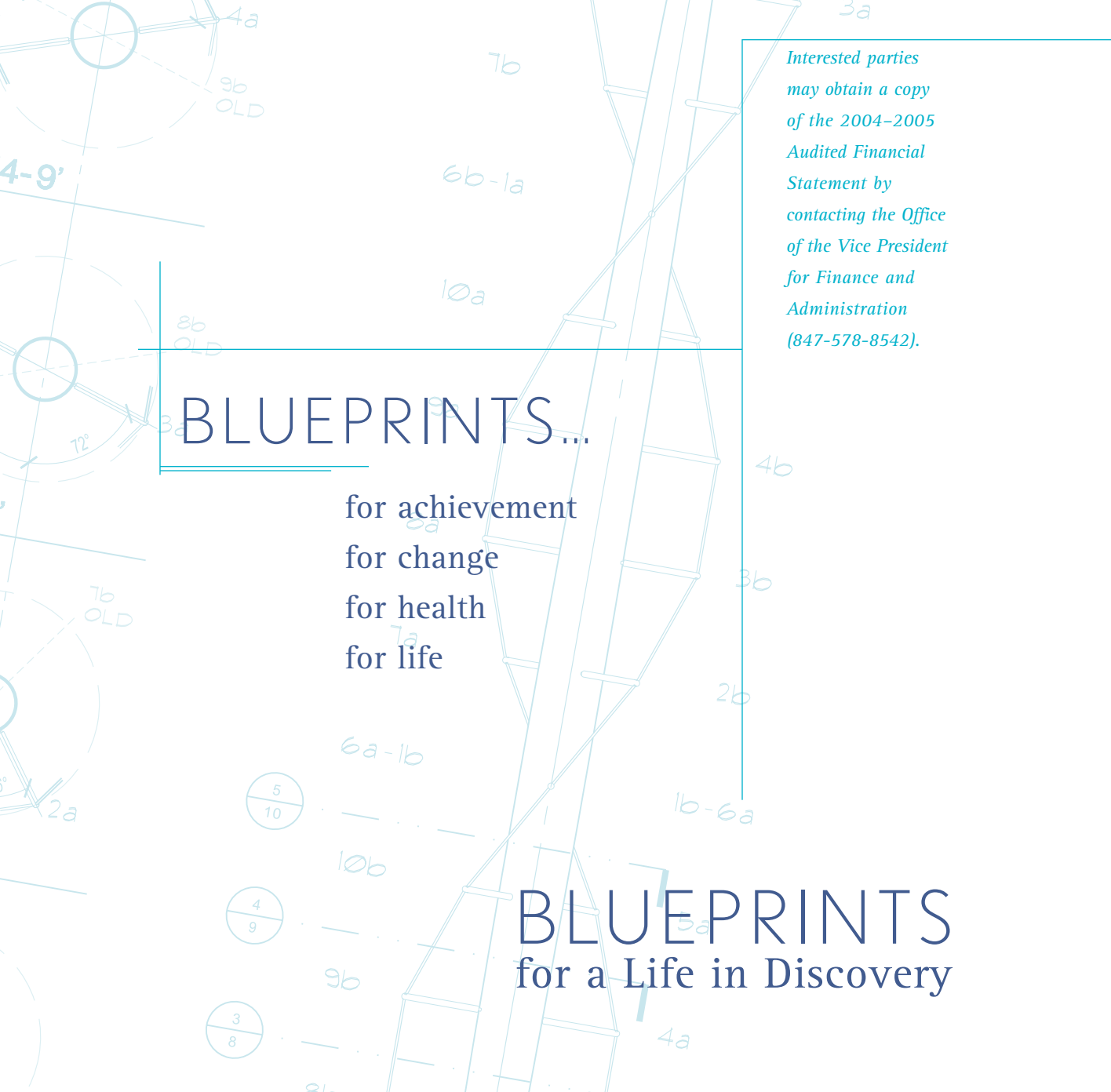
blueprints for an ambitious future





22/23

ROSALIND FRANKLIN UNIVERSITY
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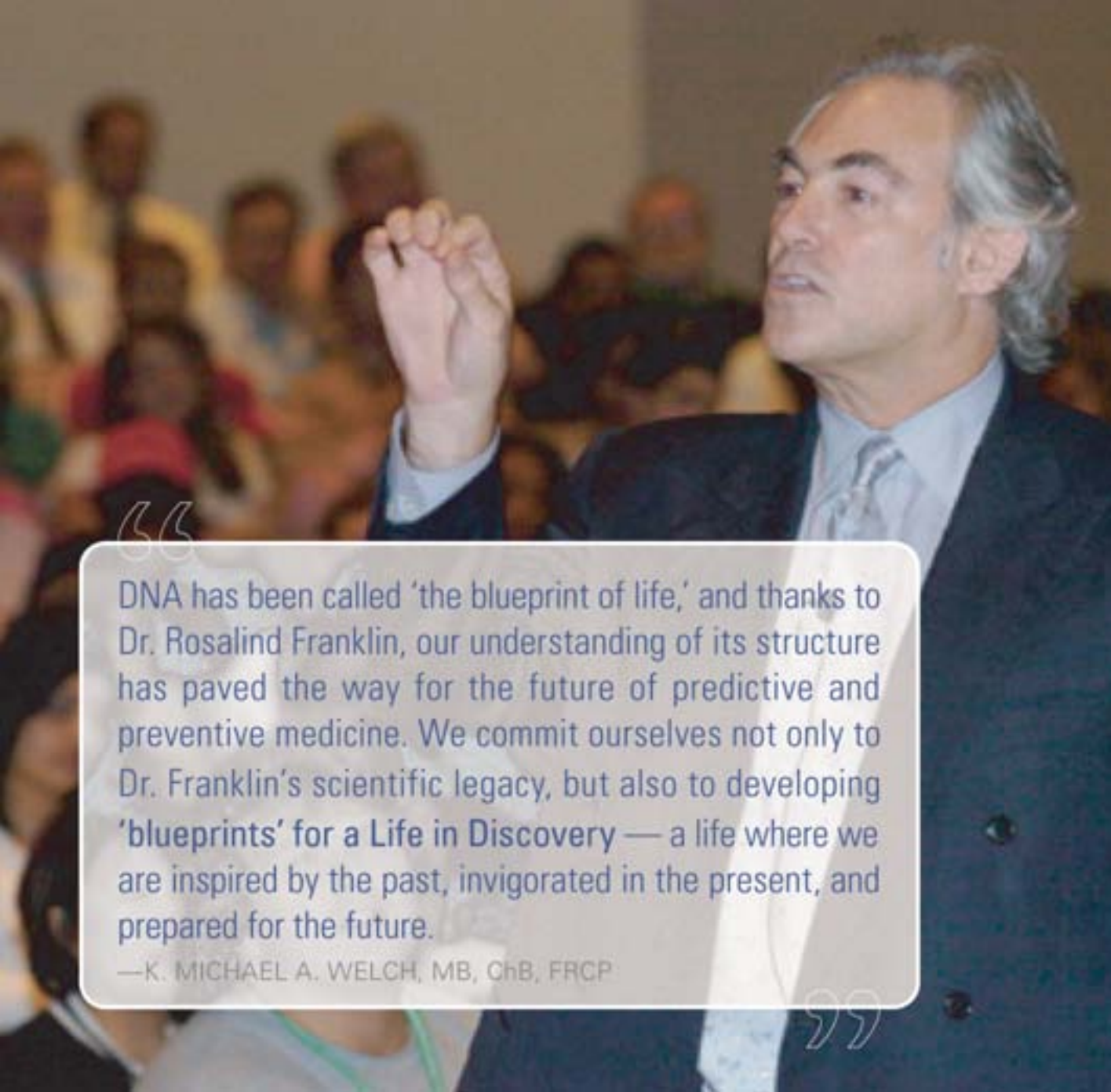
BLUEPRINTS...

for achievement
for change
for health
for life

BLUEPRINTS

for a Life in Discovery

*Interested parties
may obtain a copy
of the 2004-2005
Audited Financial
Statement by
contacting the Office
of the Vice President
for Finance and
Administration
(847-578-8542).*



“DNA has been called ‘the blueprint of life,’ and thanks to Dr. Rosalind Franklin, our understanding of its structure has paved the way for the future of predictive and preventive medicine. We commit ourselves not only to Dr. Franklin’s scientific legacy, but also to developing ‘blueprints’ for a Life in Discovery — a life where we are inspired by the past, invigorated in the present, and prepared for the future.

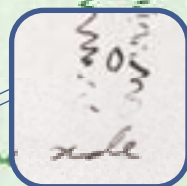
—K. MICHAEL A. WELCH, MB, ChB, FRCP

”



Photo Credits: Rosalind Franklin Portrait. National Portrait Gallery, London, UK. Handwritten notes on facing page and covers taken from the notebooks of Dr. Rosalind Franklin: Courtesy of Churchill Archives Centre, Cambridge, UK.

is similar to bottom half of other



Sugar rings ~ " P - P - again P-O to one side

if all chains steric factors - now to A B C D E

① Make C_5 equidistant from O_3 and O_6

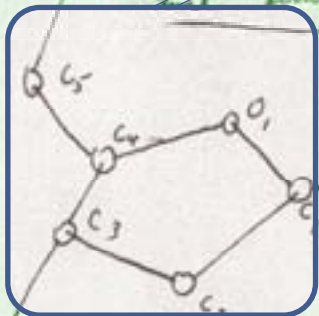
② C_3 tilted away from O_a , but not equidistant betw. O_a and O_5 $\therefore$ this would make C_2 approach O_3

$\therefore$ compromise if 2 premises

③ $P-O_5-C_5-C_4$ coplanar

This keeps O_5 as near. (1 eqd)

- c.f. Bro distance from O_1 and C_3



“

...and work goes on — in fact, quite well.

—ROSALIND E. FRANKLIN, PhD

”

We gratefully acknowledge the following individuals, who helped bring this project to life – who, themselves, drew the “blueprint” for this publication:

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Sunaina Yadav

Photo Captions

Inside cover: Sunaina Yadav, Biochemistry and Molecular Biology, PhD Candidate

Page 1: All-school picnic, RFU Pavilion

Page 3, left: Ruth M. Rothstein, Chair of the Board of Trustees

Page 3, right: K. Michael Welch, MB, ChB, FRCP, President and CEO

Page 5: Elzbieta Indyk, MS, Research Associate, Physiology and Biophysics

Page 6, right: David G. Armstrong, DPM, PhD, Professor of Surgery; Director, Center for Lower Extremity Ambulatory Research

Page 7: Matthew Green, BS, Senior Research Associate, and Swamy Nagubadi, MD, Pulmonary Fellow, review research data in the Physiology and Biophysics laboratory.

Page 8: Yamin Wang and Hong Shen, Biochemistry and Molecular Biology, PhD Candidates, and David Mueller, PhD, Professor of Biochemistry and Molecular Biology

Page 10: Teams learn to respond to real-world medical emergencies by using the Emergency Care Simulator in the Education and Evaluation Center.

Page 11: Gordon Denno, DPM, facilitates a bandaging workshop with Scholl students.

Page 12: Stephanie Wu, DPM, Assistant Professor of Surgery, CLEAR Fellow (*right*), leads students through an operating exercise.

Page 13: Bone density screening is one of many cutting-edge technologies in use at The Clinics at Rosalind Franklin University.

Page 14: Students take time to check their e-mail at the kiosks in the student union.

Page 15: (L-R) Podiatry students Jennifer Fong, Nisha Sherma and Iris Zhao traverse the commemorative brick walkway.

Page 16: Heather Gannon, Physician Assistant student, examines a young boy at the Kids 1st Health Fair.

Page 17: Students at a local middle school provide helping hands to a Chicago Medical School student, who demonstrates how to wrap an ace bandage.

Page 18: Hari Raghu, PhD, Postdoctoral Research Associate, and Jue Wang, Research Associate, Microbiology and Immunology

Page 20: Pathologists' Assistant students Katie Nelson, Adriane Primas and Eric Daley examine tissue samples with John E. Vitale, MHS, PA(ASCP) (*second from left*), Acting Chair and Assistant Professor, Pathologists' Assistant Department.

Page 21: Kelly Conrad, PhD candidate, Neuroscience, works in the labs of Dr. Marina Wolf.

Page 23: Students in the Education and Evaluation Center prepare to enter the exam rooms to meet their standardized patients.

Inside back cover: Dr. K. Michael Welch addresses students at the kick-off of this year's Interprofessional Healthcare Teams course.

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