

BIOGRAPHICAL SKETCH

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NAME: Dael Geft

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Associate Director, Pulmonary Hypertension Research and Education

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY
Columbia University, New York, NY	BA	05/2001	Philosophy/Religion
Sackler School of Medicine – New York State American Program, Tel Aviv, Israel	MD	05/2005	Medicine
Cedars Sinai Medical Center, Los Angeles, CA		2008	Internal Medicine Residency
Cedars Sinai Medical Center, Los Angeles, CA		2012	Cardiovascular Disease Fellowship
Cedars Sinai Medical Center, Los Angeles, CA		2013	Advanced Heart Failure/Heart Transplant Fellowship

A. Personal Statement

I am currently the Associate Director of Pulmonary Hypertension research and education at the Cedars-Sinai Smidt Heart Institute. I am actively involved in both clinical practice as well as research and education in the fields of advanced heart failure, transplant, mechanical circulatory support and pulmonary hypertension. I have publications in journals such as the Journal of heart and Lung Transplant and have written book chapters on pulmonary hypertension and cancer. My main focus is on management of pulmonary hypertension and heart failure and I have spoken at various conferences and symposia on these topics. I am also involved in a number of ongoing clinical trials for CHF (medication and device based), immunosuppression for heart transplantation as well as management of pulmonary hypertension with novel agents and stem cells.

B. Positions and Honors

Positions and Employment

- 2019 – Present Volunteer Clinical Instructor, Department of Medicine
University of California Los Angeles, Los Angeles, CA
- 2018 – Present Associate Director, Pulmonary Hypertension Research and Education
Smidt Heart Institute at Cedars Sinai Medical Center, Los Angeles, CA
- 2013 – Present Attending, Cardiology
Smidt Heart Institute at Cedars Sinai Medical Center, Los Angeles, CA

Board Certifications

Board Certified in Advanced Heart Failure and Transplant Cardiology

Board Certified in Cardiovascular Disease
Board Certified in Internal Medicine
Board Certified in Adult Comprehensive Echocardiography, NBE
Board Certified in Nuclear Cardiology, CBNC

Professional Memberships

International Society of Heart and Lung Transplantation (ISHLT)
American College of Cardiology (ACC)
Heart Failure Society of America (HFSA)
Pulmonary Hypertension Association (PHA)

Professional Committees

2013 – Present Heart Transplant Executive Committee
2013 – Present MCS Executive Committee

C. Contributions to Science

Heart transplantation remains the most durable therapy for end stage heart failure. Sensitization, a state of elevated antibody levels in the potential recipient, still stands as a major barrier to finding the appropriate compatible donor. We have analyzed the effects of sensitization on donor wait time and have explored novel desensitization therapies in order to shorten wait list times for sensitized patients as well as created strategies to treat highly sensitized patients post transplantation.

1. **Geft D**, Kobashigawa J. Current concepts for sensitized patients before transplantation. *Curr Opin Organ Transplant*. 2017 Jun; 22(3):236-41.

Congestive heart failure remains one of the highest causes of morbidity and mortality. Making the diagnosis on time and understanding how to treat and monitor heart failure patients can be challenging. Biomarkers have been shown to be helpful in making the diagnosis of heart failure, monitoring heart failure patients' response to therapy and provide prognostic information. Yet there are limitations in sensitivity and specificity. We have explored a novel biomarker (BIN1) and its utility in making the diagnosis and prognosis in heart failure patients.

1. Nikolova AP, Hitzeman TC, Baum R, Caldaruse AM, Agvanian S, Xie Y, **Geft D**, Chang D, Moriguchi J, Hage A, Azarbal B, Czer LSC, Kittleson M, Patel J, Wu AHB, Kobashigawa J, Hamilton M, Hong TT, Shaw RM. Association of the Plasma Cardiac Bridging Integrator 1 Score, a Novel Diagnostic Biomarker, with Heart Failure with Preserved Ejection Fraction and Cardiovascular Hospitalization. *JAMA Cardiol*. 2018 Dec . 3(12): 1206-1210. PMID: 30383171

Contributions include treating patients, obtaining blood samples, and reviewing the manuscript for publications.

While there is a plethora of data and proven therapies for HFrEF, there are very few, if any, proven therapies for HFpEF, in particular, for infiltrative restrictive cardiomyopathies such as cardiac amyloidosis. This group of patients is very limited with respect to both medical therapy as well as mechanical circulatory support options. We have studied the outcomes of these patients now after treatment with a novel medical therapeutic agent as well as after surgical mechanical support primarily with the total artificial heart.

1. Kittleson MM, Cole RM, Patel J, Ramzy D, Passano E, Chang DH, **Geft DR**, Czer L, Vescio R, Chung J, Kobashigawa JA, Arabia F, Esmailian F, Moriguchi JD Mechanical circulatory support for cardiac amyloidosis. *Clin Transplant*. 2019: e13663. Epub 2019/07/17. doi: 10.1111/ctr.13663. PubMed PMID: 31309629. 2019 July 15.

2. Maurer MS, Schwartz JH, Gundapaneni B, Elliott PM, Merlini G, Waddington-Cruz M, Kristen AV, Grogan M, Witteles R, Damy T, Drachman BM, Shah SJ, Hanna M, Judge DP, Barsdorf AI, Huber P, Patterson TA, Riley S, Schumacher J, Stewart M, Sultan MB, Rapezzi C; ATTR-ACT Study Investigators (**Geft, DR**). Tafamidis Treatment for Patients with Transthyretin Amyloid Cardiomyopathy. *N Engl J Med*. 2018 Sep 13;379(11):1007-1016. doi: 10.1056/NEJMoa1805689. PMID: 30145929.

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

Abbott
MOMENTUM 3 (Multi-Center Study of Maglev Technology in Patients Undergoing MCS Therapy with HeartMate 3™
Role: Co-Investigator
Ramzy (site PI) 11/13/2015 to present

Abbott
MOMENTUM 3 CAP Multi-Center Study of Maglev Technology in Patients Undergoing MCS Therapy with HeartMate 3™ Continued Access Protocol: Post-Approval Continued Follow-up
Role: Co-Investigator
Ramzy (site PI) 11/11/2016 to present

Alexion Inc.
The DUET Cardiac Trial - The De-novo Use of Eculizumab Alongside Conventional Maintenance Therapy in Presensitized Patients Receiving Cardiac Transplantation: An, Open-Label, Investigator-Initiated Pilot Trial. Investigational pilot trial to determine the safety and efficacy of the de-novo use of eculizumab to prevent symptomatic antibody (AMR≥1) and/or cellular mediated rejection (≥2 Grade 2R) in highly sensitized cardiac transplantation recipients (PRA>70%).
Role: Co-Investigator
Patel (PI) 2014-Present

Pfizer, Inc.
ATTR- EXT - A Phase 3 Multicenter, Randomized, Double-Blind, Extension Study To Evaluate The Safety Of Daily Oral Dosing Of Tafamidis Meglumine (Pf-06291826) 20 Mg Or 80 Mg In Subjects Diagnosed With Transthyretin Cardiomyopathy (Ttr-Cm)
Role: Co-Investigator
Patel (Site PI) 3/24/17-3/23/2020

Genzyme
A Pilot Randomized Study to Assess the Effect and Safety Profile of Thymoglobulin® in Primary Cardiac Transplant Recipients (ATG): A 12-month, single center, randomized, open-label study of efficacy comparing immediate treatment with and without Thymoglobulin® 1.5 mg/kg/d for 5 consecutive days in heart transplant recipients. The purpose of this study is to definitively establish Thymoglobulin's potential efficacy in preventing cardiac allograft vasculopathy.
Role: Co-Investigator
Kobashigawa (PI) 07/01/2018 – 07/01/2021

Alnylam Pharmaceuticals
APOLLO-B - A Phase 3, Randomized, Double-blind, Placebo-controlled Multicenter Study to Evaluate the Efficacy and Safety of Patisiran in Patients with Transthyretin Amyloidosis with Cardiomyopathy (ATTR Amyloidosis with Cardiomyopathy)
Role: Co-Investigator
Patel (site PI) 02/01/2020 – 01/31/2022

Eidos Pharmaceuticals
Eidos AG10-301/ATTRIBUTE-CM - a prospective, randomized, multicenter, parallel-group study will evaluate the efficacy and safety of AG10 in symptomatic subjects compared to placebo, administered on a background of stable heart failure therapy
Role: Co-Investigator
Patel (site PI) 05/21/2019 – 05/20/2022

TransMedics
Esmailian (PI) 09/11/2019 – 09/10/2022

OCS-CAR-121918 - Continued Access Protocol to collect additional evidence to evaluate the Safety and Effectiveness of The Portable Organ Care System (OCS™) Heart For Preserving and Assessing Expanded Criteria Donor Hearts for Transplantation (Heart EXPAND CAP

Role: Co-Investigator

NIH/Duke University

Kransdorf (Site PI)

11/01/17-Present

Entresto™ (LCZ696) In Advanced Heart Failure (Life Study). The purpose of this study is to evaluate the effects of LCZ696 (Entresto) compared to valsartan by evaluating NT-proBNP levels. The hypothesis is that patients with symptomatic heart failure due to left ventricular systolic dysfunction, treatment with LCZ696 for 24 weeks will improve NT-proBNP levels. The study is a randomized, double-blinded trial of advanced heart failure subjects.

Role: Co-Investigator

NIH ALL-IN Study/1U01AI136816-01

Patel(Site PI)

05/01/2018– 04/30/2020

Targeting Inflammation and Alloimmunity in Heart Transplant Recipients with Tocilizumab. The primary objective of the study is to compare the efficacy of standard of care triple maintenance immunosuppression plus tocilizumab treatment versus standard of care triple maintenance immunosuppression plus placebo on outcomes as defined by a composite 1 year post-transplant endpoint of a) detection of donor-specific antibodies (DSA), b) acute cellular rejection (ACR), c) antibody mediated rejection (AMR), d) hemodynamic compromise (HDC) rejection in absence of biopsy or histological rejection, e) death, and f) retransplantation.

Role: Co-Investigator

United Therapeutics

Hage (PI)

12/29/17 – present

Southpaw 301 - A Multicenter, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety and Efficacy of Oral Treprostinil in Subjects with Pulmonary Hypertension (PH) in Heart Failure with Preserved Ejection Fraction (HFpEF).

Role: Co-Investigator

United Therapeutics

Hage (PI)

12/29/17 - present

Southpaw 302 - An Open-label Extension Study of Oral Treprostinil in Subjects with Pulmonary Hypertension (PH) Associated with Heart Failure with Preserved Ejection Fraction (HFpEF) - A Long-Term Follow-up to Study TDE-HF-30

Role: Co-Investigator

Janssen & Janssen LLC

Hage (PI)

01/03/18 -present

SERENADE – AC_055G202 - Heart failure with preserved ejection fraction and pulmonary vascular disease

Role: Co-Investigator

United Therapeutics

Hage (PI)

09/11/17- present

RIN-PH-201 - Multicenter, Randomized, Double-Blinded, Placebo-Controlled Trial to Evaluate the Safety and Efficacy of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease

Role: Co-Investigator

United Therapeutics

Hage (PI)

09/12/17 -

present

RIN-PH-202 - An Open-Label Extension Study of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease

Role: Co-Investigator

California Institute for Regenerative Medicine

Lewis (PI)

01/01/17 – present

ALPHA - Pulmonary Arterial Hypertension Treated with Cardiosphere-Derived Allogeneic Stem Cells

Role: Co-Investigator