

## EDITORIAL

-  **Fifty Shades of Yellow** D.J. Dietzen (see article on page 973) **937**

## INSPIRING MINDS

- Basil Doumas** M. Landau **939**


## PERSPECTIVE

- The Reproducibility Wars: Successful, Unsuccessful, Uninterpretable, Exact, Conceptual, Triangulated, Contested Replication** J.P.A. Ioannidis **943**

## Q&A

- Emerging Considerations for Noninvasive Prenatal Testing** Moderators: N. Korpi-Steiner and R.W.K. Chiu; Experts: S. Chandrasekharan, L.S. Chitty, M.I. Evans, J.A. Jackson, and G.E. Palomaki **946**

## OPINION

-  **Using Biomarkers to Guide Heart Failure Therapy** A.S. Jaffe and J.L. Januzzi, Jr. **954**

## CLINICAL CASE STUDY

- A Case of Unusual Drug Screening Results** B.N. Chang and M.P. Smith **958**
- Commentary** B. Magnani **961**
- Commentary** M.S. Petrie **962**

## REVIEW

- Waste, Leaks, and Failures in the Biomarker Pipeline** J.P.A. Ioannidis and P.M.M. Bossuyt **963**

## ARTICLES

### EVIDENCE-BASED MEDICINE AND TEST UTILIZATION

- Utilization of Reflex Testing for Direct Bilirubin in the Early Recognition of Biliary Atresia** L. Lam, S. Musaad, C. Kyle, and S. Mouat (see editorial on page 937) **973**

### LIPIDS, LIPOPROTEINS, AND CARDIOVASCULAR RISK FACTORS


- Cross-sectional Analysis of AGE-CML, sRAGE, and esRAGE with Diabetes and Cardiometabolic Risk Factors in a Community-Based Cohort** S.J. Loomis, Y. Chen, D.B. Sacks, E.S. Christenson, R.H. Christenson, C.M. Rebholz, and E. Selvin **980**

### PROTEOMICS AND PROTEIN MARKERS

- Quantifying the Release of Biomarkers of Myocardial Necrosis from Cardiac Myocytes and Intact Myocardium** J. Marjot, T.E. Kaier, E.D. Martin, S.S. Reji, O. Copeland, M. Iqbal, B. Goodson, S. Hamren, S.E. Harding, and M.S. Marber **990**

- Copeptin Associates with Cause-Specific Mortality in Patients with Impaired Renal Function: Results from the LURIC and the 4D Study** V. Krane, B. Genser, M.E. Kleber, C. Drechsler, W. März, G. Delgado, B. Allolio, C. Wanner, and W. Fenske, for the 4D and LURIC study investigators **997**

### DRUG MONITORING AND TOXICOLOGY

- Distinguishing Intake of New Synthetic Cannabinoids ADB-PINACA and 5F-ADB-PINACA with Human Hepatocyte Metabolites and High-Resolution Mass Spectrometry** J. Carlier, X. Diao, K.B. Scheidweiler, and M.A. Huestis  **1008**

### INFORMATICS AND STATISTICS

- Selecting Statistical Quality Control Procedures for Limiting the Impact of Increases in Analytical Random Error on Patient Safety** M. Yago **1022**

### MOLECULAR DIAGNOSTICS AND GENETICS

- Single-Stranded DNA Library Preparation Preferentially Enriches Short Maternal DNA in Maternal Plasma** J.S.L. Vong, J.C.H. Tsang, P. Jiang, W.-S. Lee, T.Y. Leung, K.C.A. Chan, R.W.K. Chiu, and Y.M.D. Lo **1031**

### CITATION CLASSIC

- Demonstration of Automated Analysis of Multiple Analytes on an Integrated Digital Microfluidic Platform** R.B. Fair **1038**

*continued*

## LETTERS TO THE EDITOR

- Postprandial Plasma Concentrations of ProANP in Patients with Type 2 Diabetes and Healthy Controls** D.P. Sonne, D. Terzic, F.K. Knop, and J.P. Goetze **1040**
- Moving Average for Continuous Quality Control: Time to Move to Implementation in Daily Practice?** H.H. van Rossum and H. Kemperman **1041**
- Total Analytic Error for Low Cardiac Troponin Concentrations ( $\leq 10$  ng/L) by Use of a High-Sensitivity Cardiac Troponin Assay** P.A. Kavsak, A.S. Jaffe, D.N. Greene, R.H. Christenson, F.S. Apple, and A.H.B. Wu **1043**
- Predictive Value of NT-proBNP in Patients with Acute Myocardial Infarction** A. Clerico and C. Passino **1045**
- In Reply** T. Suzuki, L.M. Heaney, D.J.L. Jones, and L.L. Ng **1046**

## CLINICAL CHEMIST

### WHAT IS YOUR GUESS?

- Intracellular Inclusions Detected in Stained Urinary Sediment** L.N.W. Daae and H. Andersen **1048**

### NEWS & VIEWS

- Home or Hospital? Point-of-Care CRP as a Triage Biomarker in the Primary Care Setting** T.S. Isbell **1049**

### TECHNOLOGY CORNER

- Mapping Thermal Flow under the Skin** V.S. Kumar and M. Webster **1051**

### UNVEILING THE RIGHT SIDE

- Photographic Film, Clinical Chemistry, and Art** L.J. Kricka **1054**

### SCIENCE IN THE ARTS

- Edward Hopper: American Spaces** M.H. Dominiczak **1056**

## ONLINE CONTENT

### JOURNAL CLUB

Selected articles made freely available, including helpful slides and key points for discussion in your Journal Club. The link below provides free access to both the article and Journal Club content.

**Estimated Glomerular Filtration Rate and Albuminuria Are Associated with Biomarkers of Cardiac Injury in a Population-Based Cohort Study: The Maastricht Study** Remy J.H. Martens, Dorien M. Kimenai, Jeroen P. Kooman, Coen D.A. Stehouwer, Frans E.S. Tan, Otto Bekers, Pieter C. Dagnelie, Carla J.H. van der Kallen, Abraham A. Kroon, Karel M.L. Leunissen, Frank M. van der Sande, Nicolaas C. Schaper, Simone J.S. Sep, Miranda T. Schram, Jeroen D. van Suijlen, Marja P. van Dieijen-Visser, Steven J.R. Meex, Ronald M.A. Henry  
[www.clinchem.org/content/63/4/887](http://www.clinchem.org/content/63/4/887)

### PEARLS OF LABORATORY MEDICINE

*Clinical Chemistry* Trainee Council (CCTC) is a free online program for residents and fellows in laboratory medicine. The program provides a wealth of free educational materials and interactive tools, including Podcasts, Guide to Scientific Writing, Question Bank, Pearls of Laboratory Medicine, and much more. The Pearls are brief presentations on one key topic succinctly presented using slides, audio, and transcript supplements.

Join the CCTC today ([traineecouncil.org](http://traineecouncil.org)) for free access to the following Pearls of Laboratory Medicine. With nearly 100 Pearls now available, 3 are highlighted here.

Mark Lee  
 Antimicrobial Susceptibility Testing  
 10.15428/CCTC.2016.259291

Robert Nerenz  
 Thyroid Hormone Synthesis and Transport  
 10.15428/CCTC.2016.267492

Neil Anderson  
 Molecular Testing of HIV  
 10.15428/CCTC.2015.251041

*continued*

## ACCENT®—CONTINUING EDUCATION CREDIT FOR READERS OF CLINICAL CHEMISTRY

For more information go to <http://www.aacc.org/education-and-career/clinical-chemistry-journal-continuing-education-credits>



Basil F. Doumas

**ON THE COVER** Basil Doumas. Official records list Basil Doumas' date of birth as July 16, 1930, but only because his father altered the true date so that Doumas would have an extra year to pursue his studies before being drafted for military service. This minor alteration

of the records played an important part in his future. Doumas obtained his college degree the day before he left to join the army. Fate continued to smile on Doumas and ultimately on the field of clinical chemistry. When he started in the field, the "standardization" and "harmonization" of methods was not part of the thinking of many clinical chemists. Doumas pioneered methods for accurately measuring bilirubin and important proteins. However, to many, the most notable thing about Doumas is his propensity for playing pranks. And that is the part of the story that you will need to read for yourself in our Inspiring Minds feature in this issue of *Clinical Chemistry*. (See page 939.) ©Reproduced with permission. Artist, Martin A. Knapp.



Technology Corner, podcasts, color figures for Reviews, and Clinical Chemistry Trainee Council sponsored by Department of Laboratory Medicine, Boston Children's Hospital.



Clinical Chemistry podcast coming soon to <http://www.clinchem.org>.



Individual articles may be selected to be a part of the Fast Track Program. Articles receive an expedited review, decision, and, if accepted, rapid online publication.



Video available at <http://www.clinchem.org>.



Follow us on Twitter  
[http://twitter.com/Clin\\_Chem\\_AACC](http://twitter.com/Clin_Chem_AACC)



Like us on Facebook  
<http://www.facebook.com/AACCJournals>



Clinical Chemistry apps available on iPhone, iPad, and Android.



Access our podcasts on iTunes, Stitcher, and Google Play Music.