COMMUNITY CONGRESS
WELCOMING REMARKS
November 4th, 2015
Washington, DC

Emil Kakkis, M.D., PhD
President EveryLife Foundation for Rare Diseases
Mission & Core Principals

Accelerating Biotech Innovation through science-driven public policy

We Believe:

• No disease is too rare to deserve treatment
• All new drugs for rare diseases should be safe and effective
• We could be doing more with the science we already have

We seek to achieve our goals by advocating practical and scientifically sound policies to increase the predictability of the regulatory process through scientific analysis and dialogue, grassroots support and expert-led workshops
Treatments for Biochemical and Genetic Diseases

**Successes**
- Many approved drugs
- Multibillion dollar business

**Challenges**
- Many more diseases without approved drugs

- Ceroid lipofuscinoses
- Methylmalonic acidemia
- Mannosidosis
- Mucopolysaccharidosis VII
- Sanfilippo Syndromes
- Von Gierke Disease type 1
- Galactosialidosis
- Propionic acidemia
- Wolman Disease
- Glycogen storage disease type IV
- Isovaleric acidemia
- Menkes disease
- Tay Sachs
The development process

Good Science

And then a miracle happens
Thousands of Rare Diseases Need Treatment

How can this be done with the current process?
Is there really just the valley of death?

Lost in Space | Wandering in Wilderness | Valley of Death | Clin-Reg Hell | Reimbursement Purgatory

IDEA | Model POC | Tox., IND/CTA Ph. 1 Study | Ph2/PH3 NDA | Reimbursement
0 | Yr 5 | Yr 10 | Yr 13 | Yr 15
President’s Vision

• Seek to be an agent of change for the drug development system

• We are positioned at the intersection between:
  – patients and families of the rare disease community
  – science and industry experts, and
  – the policy makers who together can enact change.

• Our Goals & Objectives:
  – Promote understanding of regulatory challenges
  – identify barriers
  – enhance collaboration among these groups
  – facilitate potential solutions to the clinical development process.
Hon. Clifford Stearns
Dr. David Fajgenbaum
Foundation Overview

Julia Jenkins
Executive Director

No Disease Is Too Rare to Deserve Treatment
EveryLife Foundation for Rare Diseases

We are unique – we are both a

– Public Policy Organization &
– Patient Organization

1) Serve & Support Rare Disease Patients
2) Build a Grassroots Advocacy Community
3) Promote awareness about Rare Diseases
4) Advance Regulatory Science & Policy
5) Drive Public Policy & Legislative Change
Community Support

North American Metabolic Academy encourages & trains the next generation of rare disease physicians and scientists

**RareGiving** gives $100,000+ back to the community in grants and scholarships to ensure FDA & Congress hears from patients

**Rare Artist** promotes awareness of rare diseases & highlights the talents of our community

**Rare Affair** promotes investment in rare disease treatments during the JP Morgan Health Care Conference in San Francisco, CA
Advocacy - Rare Disease Legislative Advocates

Brings 200 patients to Washington DC to learn about how legislation impacts access to treatments & to meet with Congress

Allows advocates who cannot come to DC to meet with their Members during August Recess, Regional Conferences train advocates

Ensures the Rare Disease Community has a permanent voice on capitol Hill through regular briefings to educate Congress

TONIGHT!!! Honors Advocates who give patients a voice on Capitol Hill

www.RareAdvocates.org
Public & Scientific Policy Initiatives

Annual Scientific Workshop brings together FDA, NIH & Industry to build the science to improve the clinical development process for rare diseases.

CTP-2 is a patient-driven campaign to make 3 specific changes to spur innovation for lifesaving treatments.

Every Beginning seeks state legislation to require a state to screen for a disease once it’s on the federal RUSP.

COLLABORATION!!
2015 Public Policy Highlights

• 21st Century Cures Act
  – OPEN ACT

• New FDA Guidance sets “Rational” Toxicology Requirements for Ultra Rare Diseases

• White Paper Published & Editorial Submitted

• BioMarkers partnership with the Manhattan Institute
21\textsuperscript{st} Century Cures Initiative

- Bipartisan effort led by Reps. Upton (R-MI) & DeGette (D-CO) (Energy & Commerce Committee) to improve the biomedical ecosystem
- The Committee spent over 1 year gathering input from stakeholders and released 4 draft bills
- The 21\textsuperscript{st} Century Cures Act (HR 6) includes a variety of provisions of critical importance to the rare disease community
- Bill passed out of committee unanimously, passed the House in July 344 to 77
- Foundation is running grassroots efforts to encourage the Senate to move forward
H.R. 6 – Rare Disease Provisions

• **Foundation Priorities:**
  – Orphan Product Extensions Now, Accelerating Cures & Treatments (OPEN ACT)
  – Improve biomarker qualification
  – Improve FDA’s ability to recruit & retain staff & keep up on the latest science
  – NIH & FDA Funding

• **Foundation supported efforts:**
  – Expanding Hope Act (Priority Review Vouchers)
  – Neurological Disease Surveillance
  – Compassionate Use Reform & Enhancement Act
  – Patient Focused Drug Development
Orphan Product Extensions Now, Accelerating Cures & Treatments

- Provides additional 6 mos. of exclusivity for companies that repurpose drugs for rare disease indication
  - Could potentially double the number of rare disease treatments

- Bipartisan & Bicameral
  - Introduced in the House by Reps. Bilirakis (R-FL) & Butterfield (D-NC) H.R.971
  - Introduced in the Senate by Sens. Hatch (R-UT) & Klobuchar (D-MN) S.1421

- Currently endorsed by over 155 patient organizations and several companies and industry orgs

- Only exclusivity provisions remaining in final house draft
  - Was opposed by Democratic leadership, Grassroots efforts turned opponents into allies

- Goal to have included in the Senate version of Cures
CTP-2 Goal - Rationalize

- Longer FDA toxicology requirements were preventing early-stage clinical trials from starting in the U.S., delaying access to lifesaving treatments for U.S. patients.

- 2014 Foundation Scientific Workshop “Rationalizing Safety Testing to Enable Clinical Studies and Approval in the US for Rare Disease Treatments” sought to address the issue.

- Earlier this year, the FDA outlined their new toxicology requirements in their draft guidance for industry, titled “Investigational Enzyme Replacement Therapy Products: Nonclinical Assessment.”
  - The guidance potentially allows for only three months of chronic toxicology animal studies if there are no adverse findings, which is a significant improvement in policy.
  - We believe this should allow more clinical enzyme replacement programs to initiate clinical studies in the U.S. rather than just in Europe and reduce the number of situations in which U.S. patients do not have access to early stage clinical trials.
Advancing Biomarkers

- Initiated a collaboration with the Manhattan Institute (think tank) to explore mechanisms for facilitating biomarker qualification
- Held meeting with thought leaders on Capitol Hill on Sept 16th
- Created a full page ad in the New York Times signed by thought leaders: “Everyone will be a patient someday”
- Discussing next steps and potential roles for industry, patient groups, Congress
Publications

• Highly Accessed Article in Orphanet Publication in February
  – Recommendations for the Development of Rare Disease Drugs using the Accelerated Approval Pathway and for Qualifying Biomarkers as Primary Endpoints in Pivotal Clinical Studies”

• Submitted Editorial to Nature Biotech:
  – Accessing the Accelerated Approval Pathway for Rare Genetic Disease Therapeutics: The need for an improved qualification process for biomarkers as primary endpoints in pivotal clinical studies of treatments for the rarest of diseases”

• Invited to author an chapter on topic “Engaging patients in therapeutic development” in the Oxford Textbook of Medicine

• Published LTE in New England Journal of Medicine supporting 21st Century Cures Initiative
The Foundation’s advocacy success has elevated us as a Policy Leader on Capitol Hill

Thank you for

#Cures2015

Max
Program Overview

Max G. Bronstein
Senior Director, Advocacy & Science Policy
www.RareCongress.org
• Mechanism to receive input from stakeholders to enable the Foundation to *prioritize* and to *address* the most pressing needs of the rare disease community
• Created working groups to address urgent policy issues
• Set tangible and achievable policy goals, devise strategies to have policy impact
What’s an Achievable/Tangible Goal?

- Educational Patient/Stakeholder Event
- White paper or editorial publication
- Congressional Briefing
- Draft Regulatory Guidance
- Sign-on Letter for Policy Change
- Policy Summit
- A National or Strategic Plan
- Propose or improve legislative language
- Influence the implementation of legislation
Working Group Mechanics

- Working groups convene via conference call and/or webinar and in-person
- Foundation staff will provide support to working groups
- Each working group will have two co-chairs, one from a patient group and another from industry
- Working groups will proceed by consensus and utilize voting when needed
Working Group Structure

Newborn Screening Industry & Patient Co-Chairs & Working Group Members

Public Policy Industry & Patient Co-Chairs & Working Group Members

EveryLife Foundation – Staff Support

Regulatory Science Industry & Patient Co-Chairs & Working Group Members

No Disease Is Too Rare to Deserve Treatment
Who can be a member of Community Congress?

- Biopharmaceutical company representatives
- Patient organization representatives (board members, exec directors etc.)
- Other stakeholder organizations are welcome!
Community Congress Membership Form

MEMBERSHIP AGREEMENT

Thank you so much for your interest in the EveryLife Foundation’s Community Congress, a membership-based program dedicated to bringing patient organizations, industry leaders, and other rare disease organizations together. Members will learn about the Foundation’s scientific and policy goals, and provide valuable insight on prioritizing future initiatives. In addition, members will participate in working groups, co-chaired by an individual from industry and from the patient community.

Current planned working groups include:
- Public Policy
- FDA Regulatory Science
- Newborn Screening

Individual working groups will identify specific topics or issues they wish to prioritize and may take action by writing white papers, holding briefings, running workshops or other actions to effect change.

Members of the Community Congress Working Groups will be expected to be active participants. This entails helping to achieve policy goals by identifying critical and/or unmet policy issues, as well as areas where groups can make tangible and achievable policy impact. The Foundation will coordinate working group efforts and logistics to ensure that goals are being met.

Working groups will convene via conference call and/or webinar 2-3 times/year in addition to an annual, in-person meeting in Washington D.C., for a time commitment averaging 1-2 hours/month. Members will be expected to share policy-relevant information and collaborate with other members and/or working groups as needed.

Membership Level
- ☐ FREE Patient Orgs. & Govt. Agencies (patient group representative should be Executive Director, board member, or staff)
- ☐ $20,000 Industry Leader - 3 Participants
- ☐ $10,000 Mid-Cap - 2 Participants
- ☐ $5,000 Emerging - 1 Participant
- ☐ $2,500 Start-up - 1 Participant
- ☐ $500 Academic/Medical - 1 Participant
## Membership Levels

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<thead>
<tr>
<th>Membership Level</th>
<th>Description</th>
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<tr>
<td>$20,000</td>
<td>Industry Leader (3 participants)</td>
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<td>$10,000</td>
<td>Mid-Cap Bio (2 participants)</td>
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<td>$5,000</td>
<td>Emerging Bio (1 participant)</td>
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<td>Healthcare/Policy Consultant, CRO, Trade Org, (1 participant)</td>
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<tr>
<td>$500</td>
<td>Academic/Medical Organizations (1)</td>
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<tr>
<td><strong>FREE</strong></td>
<td><strong>Patient Org/Government Agency (1)</strong></td>
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Next Steps & Q&A

• Patient orgs: welcome to sign-up today at no cost and join working group meetings in the afternoon

• Industry: welcome to audit the working group meeting in the afternoon

• Questions: mbronstein@everylifefoundation.org

• Thank you Sponsors!

www.RareCongress.org
Matt Might
Steve Smith
Chief Patient Advocate
Medidata Solutions
Regulatory Science
Working Group Update

No Disease Is Too Rare to Deserve Treatment
Regulatory Science Working Group

Members

Overview of FDA’s Rare Disease Guidance:
- Rare Diseases: Common Issues in Drug Development: Guidance for Industry

Response to Guidance
Regulatory Science Working Group - Members

Pat Furlong Parent Project Muscular Dystrophy
Annie Kennedy Parent Project Muscular Dystrophy
Frank Rivera Sarcoidosis of Long Island
Lisa Schill RASopathies Network USA
Jack Kelly Lymphangiomatosis & Gordham’s Disease Alliance
Steve Smith MPS Parent Advocate
Mladen Bozic Shire Pharmaceuticals
Melissa Hogan Saving Case & Friends Inc.
Anne Achee National LeioMyoSarcoma Foundation
May Orfali, Rare Disease Unit, Pfizer Inc.
Lynne McGrath RegenxBio
Bill McCue, PRP Alliance Inc.
Badri Rengarajan Pemphigus & Pemphigoid Foundation
Laura Mitic, Bluefield Project to Cure Frontotemporal Dementia
Max Bronstein EveryLife Foundation for Rare Diseases
Emil Kakkis EveryLife Foundation for Rare Diseases
Overview of FDA’s Rare Disease Guidance

We applaud Guidance, but it falls short

HPM Law Firm calls it: A Primer for RD Drug Dev
Rare Disease Guidance

*Describes issues & tools for drug developers:*

- Natural history of disease lacking
- Long term studies lacking
- Validation of biomarkers mentioned
- Risk vs. Benefit mentioned
- Endpoint selection issues
Too General & leaves uncertainty in place about:

- Small sample sizes
- Heterogeneity
- Resource gap for long term studies
- Natural history takes too long
- Biomarkers
- Risk vs. Benefit
- Patient Reported Experience
Working Group Response to Guidance

Need to accelerate now.
Not just in long term

Request **methodology** to clarify how to generate the evidence to get approvals in **short** term
Links

1. FDA Releases Primer on Rare Disease Drug Development: Discusses Utility of Natural History Studies. FDA Law Blog: Hyman, Phelps, & McNamara
   

2. Rare Diseases: Common Issues in Drug Development: Guidance for Industry
   
   http://www.regulations.gov/#!documentDetail;D=FDA-2015-D-2818-0002
Newborn Screening

Working Group Report

Dean Suhr

November 4th, 2015
Newborn Screening Working Group

- NBS – Where Are We?
- 2015 – Progress & Status
- 2016 – Focus
About Me ...

- **Newborn Screening Advocate** for EveryLife Foundation
  - Part time, based in Oregon, facilitating NBS WG

- Rare disease dad ... *metachromatic leukodystrophy*
  - Launched MLD Foundation in 2001
  - MLD screen is at least a year out ... pilot in 2016
  - Several therapies in clinical trial
  - Very active for MLD and Rare Disease

- Newborn screening
  - Active with ACHDNC and policy
  - RUSP Roundtable is our initiative
NBS – Current Status

- **NBS in US is 52 years old**
  - Heal prick, hearing, and heart test at birth
  - 6,000 detected from 4 million births each year

- **NBS is a Public Health program, not just a test**
  - "Out of Range" screen → diagnostic confirmation, therapy & follow up
  - Issues ... consent, access, ethics, research
  - Many stakeholders
NBS – Current Status

• Federal HHS Advisory Committee (ACHDNC)
  – ACHDNC maintains the RUSP –
    **Recommended Uniform Screening Panel**
  – 32 core disorders on current RUSP
    • Only 3 added since 1st RUSP in 2006
    • ALD is on HHS Secretary’s desk to be added

• **State’s rights with regard to implementation**
  – RUSP is not required to implement in a given state
  – State does not have to follow RUSP, but they seem to do so ... often years later
Screening of the 32 Core Disorders

* Screening is on the state panel and fully implemented in the state

No Disease is too rare to deserve treatment

Slide courtesy of APHL
Timeline of adding to state panel

**General Process for Adding Conditions**

- State(s) consider condition(s), design and execute studies, provide study data
- Condition is added to the RUSP
- State decides to add or not to add condition
  - 6 months to 1 year
- State changes rules/statutes
  - 6 months to 1 year
- State obtains funding
  - 1 to 3 years
- State conducts implementation or pilot
  - 1 to 3 years

6-12 mo
6-12 mo
1-3 yrs
1-3 yrs
SCID – added to RUSP in 2010

- 2015: 66% of states and 72% of newborns are screening
- By end of 2016, 86% of states will be screening

No Disease Is Too Rare to Deserve Treatment

Slide courtesy of APHL – NewSTEPs
NBS & Research

• Primary purpose of NBS is identifying newborns
• Important but secondary benefit is research
  ─ Quality control & improvement
  ─ Blood spot retention & research access
  ─ Analysis of screening results – health trends
  ─ Development of new screens
  ─ Development of new therapies

• Common law now limiting research
  ─ Consent & Ethical concerns ... “blood is DNA”
Current NBS Advocacy Efforts

• State-by-state legislation for individual conditions
  – 1 effort at federal level to mandate ALD
• EveryBeginning – CA mandatory RUSP legislation
• RUSP Roundtable – committee scope, methods, genomics, issues, access, viable therapy, ethics & trends
• General public education
• Consent & research – addressing Common Law & Section 12
• State NBS reporting/tracking and analysis
NBS Working Group

Unique ...

- Many organizations collaborating
- Participant driven projects and goals
- Working towards efficiencies and progress
2015 Progress

• Sept. Webinar
  – Strong cross-condition desire to collaborate

• Post-webinar survey to establish WG priorities

• Oct. Webinar
  – Focus on narrowing 2016 priorities

• Nov. WG Meeting
  – Start work on 2016 project
Working Group members

• Adrenal Insufficiency United
• Aidan Jack Seeger Foundation
• American Behcet's Disease Assoc.
• Hunter Syndrome Foundation
• Jonah's Just Begun
• MLD Foundation
• National MPS Society
• Pediatric Hydrocephalus Foundation
• PPMD/SBTSF
• Sanfilippo Foundation for Children
• The Myelin Project
• United Leukodystrophy Foundation

Shire
UltraGenyx
Audientes

Good start but we need to double the participation!
State Toolkits – under consideration

- **Advocacy toolkits**

  *Goal: empower advocates to enhance NBS in their state and move towards more uniform screening*
  
  – Capture & organize contacts, resources, philosophies, existing legislation and structure by state
    
    * Initial focus on handful of key states
  
  – Platform to hold and share this information
  
  – Collaborative process to gather and enhance the toolkits over time by sharing experiences & knowledge
Working Group Room Assignments

- Public Policy (Expanded Access) – Revelle Breakout Room with Max & Grant
- Regulatory – Ableson Breakout Room with Dr. Kakkis & Stephanie
- Newborn Screening – Haskins Breakout Room with Dean & Andy
Thank you!